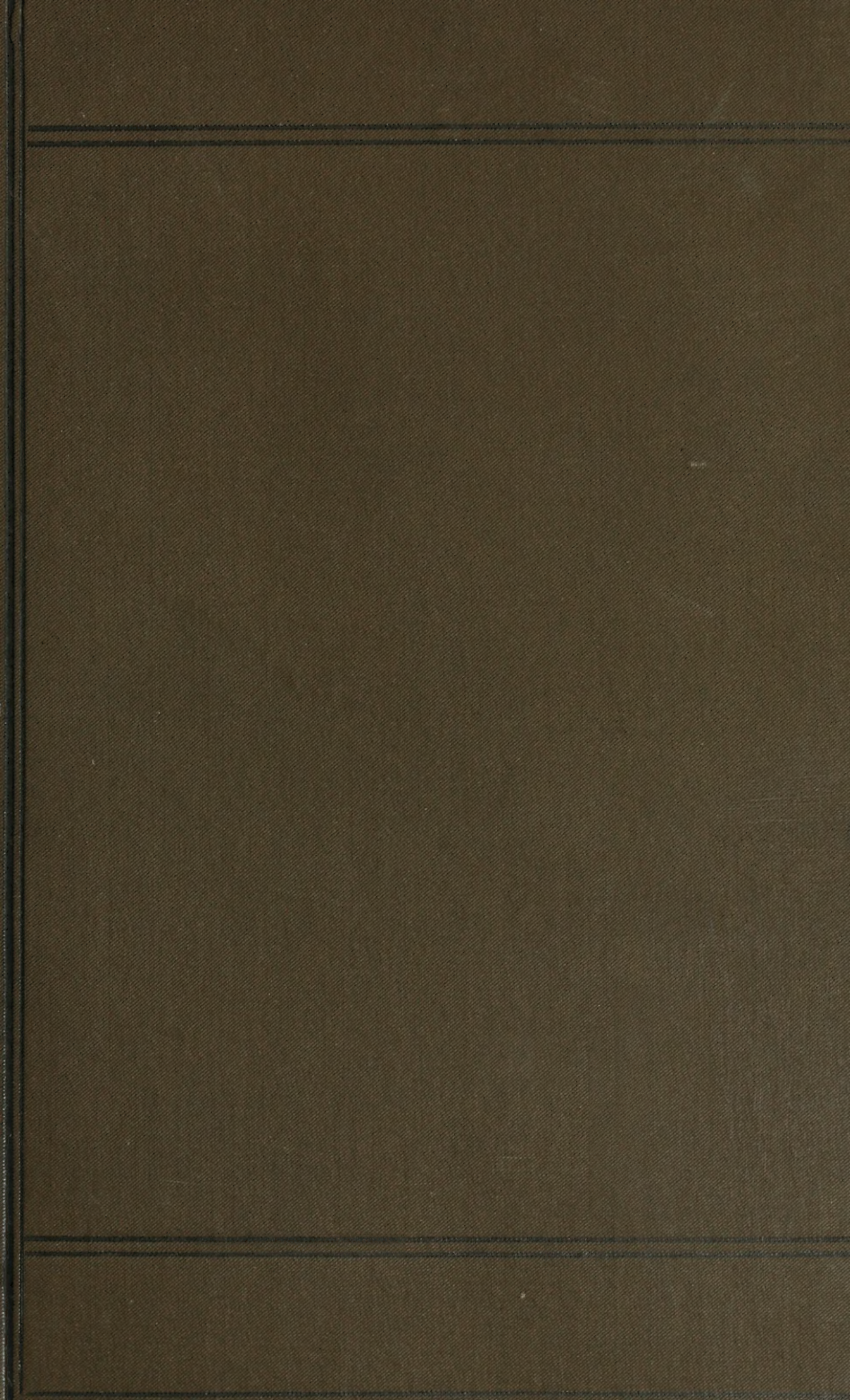




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BIRDS ON THE BRITISH LIST:

Their Title to Enrolment considered,

ESPECIALLY
WITH REFERENCE TO THE BRITISH ORNITHOLOGICAL
UNION'S LIST OF BRITISH BIRDS:

WITH A FEW REMARKS UPON 'EVOLUTION,'
AND NOTES UPON THE RARER EGGS.

THOMAS
BY THE REV. GREGORY SMART, M.A.
(LATE SCHOLAR OF TRINITY COLLEGE, CAMBRIDGE.)

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BIRDS ON THE BRITISH LIST.

Their Title Considered.

TO PERSONS who are desirous to make a collection of Birds ; or their eggs ; and to confine that collection to those of this country ; it is of importance to be clear as to what birds *are*, or *are not* British : and it appears to me that 'British Birds,' and 'Birds on the British List' are not quite the same thing.

The difficulty of determining which *are* 'British Birds' consists in the different views which those Ornithologists take, who, by their experience, and publications, are justly accepted as law-givers.

The difficulty, as to what Birds should be upon the British List, consists in the *authenticity* or *non-authenticity* of their '*occurrence*' in these Islands.

The evidence, when fairly put can be competently judged by most persons who take an interest in the subject. But it has been most differently *admitted*, or *rejected* by our best men. It seems manifest, if a distinction be drawn between 'British Birds,' and 'Birds on the British List,' that a *single occurrence* of any wild bird, from *natural causes*, should entitle that bird to a place on our List ; but it should take much more to constitute it a British Bird. Upon how much more the

Doctors are not agreed, as will be seen when their *judgments* pass in review. Sometimes a single occurrence is sufficient; sometimes that is sufficient if it be a Palæ-arctic bird; but the single American visitant is rejected. Sometimes *two occurrences* admit the bird, whilst one of our best Authorities once went so far as to say that no bird should be considered British that did not breed in the land.

Mr. Dresser says in his article on the Black-billed Cuckoo:

"If there is no doubt that a species has been obtained on one or two occasions, and there is no probability of its being one escaped from confinement, and also if its range is such as to admit of its having been driven by stress of weather, or straggled to the locality where it has been obtained, it is better to include and figure it than to pass it over in silence." And this because there may have been others unrecorded, and it tends to keep Naturalists on the look out for the species.

This mention of the range, and the effect of storm and wind upon the birds' movements, when taken with Mr. Baird's opinion, should certainly dispose of the exception taken to American species: in this gentleman's opinion the occurrence, out of all proportion, of American birds in Britain, compared with their record on the Continent of Europe, not even excepting Heligoland, is due to the prevalence of Westerly gales on the Eastern coast, especially at the period of the Autumnal Migration; *"when they follow its coasts, or cross its curves, often at a considerable distance from land, or at a great height above it and are carried away to sea, mainly about latitude 45°, the line of the greatest intensity of winds, the first land they can make is England, whence the fact that most of the species have occurred on the British Islands, as well as Heligo-*

land, equally well fitted to attract stragglers and furnish them a resting place.

Mr. Seebohm endorses this view where he says the American visitants probably "*cross, or attempt to cross the Atlantic, birds that have lost their way in migrating southwards from Labrador, or have been driven out to sea by heavy gales. Probably the greater number of these birds perish ; but some succeed in reaching Europe with or without the help of an occasional rest on the rigging of some of the numerous ships crossing the ocean.*"

But the same author points out another route by which they reach us : "*Most of those birds which visit this country are inhabitants of the North-west of America, many of them even breeding on the Siberian coast ; and there can be little doubt that they travel across Asia, appearing on our Islands in the great stream of migration which reaches us from the east.*"

Such considerations seem to render it more probable that the occurrences of such birds, for an example, as the Red-winged Starling, with its known powers of flight, and which has been taken many times in the years 1843-'44-'65-'66-'67, should have been true occurrences ; than that dealers, and aviary keepers should be so *continuously careless* with their valuable birds, as to allow such numbers to escape ; for it is well to remember that it cannot be supposed that *all* the birds which escape are *captured*, nor all that are captured *recorded*.

I have once or twice lost birds from my Aviaries, but they were never captured, or at any rate never recorded : the Plumhead Parrakeet, the Pope ('*Passerina Lavata*'), and I have seen the Cardinal ('*Passerina Cullata*') flying about in my brother's grounds ; none of these were recorded ; of such great rarities as have been *seen once*, and have evaded the gun, wherever they have flown to,

there has seldom been a second record, except in the case of the Flamingo.

So it was with the *Ægyptian Vulture*, seen in company with the bird shot in Somersetshire, in 1825; unless it were one of the two seen at Bridgewater, in 1826, it is not known that the bird was ever again seen.

So it was with the *Demoiselle Crane*, (seen with its mate); which was shot, in Orkney, 1863; and there are many like instances; *the second bird* was never, so far as is known, seen again.

Nor is it possible to compute, if twelve birds like the Red-winged Starling are captured, and *recorded*, how many more may be abroad that are captured, but *not recorded*; and how very many more may be abroad *neither captured, nor recorded*: it were an interesting problem to solve, if on twelve occasions, ranging over so many years, *Agelæus Phœniceus* is carelessly lost from confinement, and observed, how many more times must bird-fanciers have lost Red-winged Starlings, which have roamed the country where no Naturalist has been by to take note, or taking note, taken trouble to record.

Sometimes occurrences have been set down to the score of '*escaped*,' on the plea that such a species was not a wanderer; as the Purple Gallinule, but, per contra, it is recorded that our Corn Crake has occurred casually on the East coast of North America, including Greenland (Bulletin, U.S. National Museum, 1881).

There have been 14 occurrences of the American Bittern.

Sometimes occurrences are rejected from unlikelihood through other causes: thus the Swallow-tailed Kite is not included in his fine work on the birds of Europe, by Mr. H. E. Dresser: and I believe it is partly on the plea, that being an insectivorous bird mainly, it would not probably

leave its own region for these cold shores; but it has not been supposed, I imagine, that rare birds which have visited Britain have done so always, or perhaps even often of their own free will; and Brewer, in his North American Oology, says of this bird "*it is a great wanderer.*" We are promised, I believe, another splendid work from able Naturalists, to which Lord Lilford's name is appended, may we not hope that many difficulties, and seeming inconsistencies will be removed, and reconciled; and above all things the question which affects the *British authenticity of certain species* set at rest.

I have no right to do more than express a desire for information, having had but little experience; and being far removed, not only from persons who do understand these matters, but also from any library to which I could have resort to save me from errors on a complicated subject; except when, during a short holiday, I have been able to spend a few hours in the British Museum, or the University Library (Cambridge).

To resume the consideration of the title of certain Birds to be enrolled upon the British List, there is the case of the Gallinules: these beautiful birds are not unfrequently imported, and kept in confinement; if they are *unpinioned* we may presume they are placed in *enclosed aviaries*, where surely they are carefully preserved, being valuable and expensive birds: if they are *pinioned* they may be placed in open enclosures; if *these* escape they would be known at once to be 'escaped.' Nor could they range far from their owner's preserves; long-legged skulkers though they be, before by their brilliant appearance they would be observed, and claimed.

Neither I presume can it be said, as has been said concerning the innumerable Geese that have been rejected amongst the 'escapeds,' that the pinioned parents probably bred on some of the ornamental waters in parks,

and that their broods have been allowed to range: if this extraordinary circumstance had taken place, the escape of British-bred Gallinules, surely we should have heard of it: there are no less than three species rejected by our Authorities, as 'escaped,' the Purple Gallinule, the Green-backed Gallinule, and the Martinique Gallinule, which bird, I believe, the American List calls the Purple Gallinule; and of these species, *no less than seven* have been captured since 1863, and there are *others recorded*: and it is significant that the American species was found in Ireland, in 1846; I do not know that any enquiry was made at that early date, as to who, in Ireland, was keeping these birds *unpinioned*.

Again there is the case of birds which have occurred *in pairs*, or at any rate *in couples*, here, also, there is diversity of opinion as to whether they should, or should not be enrolled.

The Andalusian Hemipode for example, it is admitted that on the first occurrence of this species *two birds* were shot. But Mr. Seebohm rejects the occurrence on the plea that the bird is *frequently kept in confinement* and may possibly escape: But is it frequently so kept? I have for many years had large aviaries of birds; and to stock them have continually visited all the principal dealers in London, and Liverpool, but I never was shewn an Hemipode.

Mr. Cross, one of our largest importers, informs me that he never had the Hemipode but once, and then sold it to a foreigner.

Nor have I ever observed it in any Zoological Gardens in England, or on the Continent: not that this fact is conclusive in the least that it is not occasionally to be found in confinement.

The question, however, is: how do Aviary keepers

contrive to let out *both their birds at the same time*. Another question is, if they are so let out in company, how is it that they are so composed as to *keep together*; and not rather so fluttered as to fly wildly in any direction, and so disperse: the Hemipodes we can imagine flying a short distance, and at night being attracted by each other's call: but in the instance of the Demoiselle Cranes, which occurred in Orkney, and are rejected on the same plea, and with more unanimity; two birds escaping would probably, one or other, take a far distant flight, and, in the first agitation of renewed liberty, probably a divergent one, from its companion.

How rarely we hear of birds being *missing about the time previous* to the capture of these supposed 'escapeds,' there is *one instance* in the Flamingo, of August, 1873.

This bird, about which there is no unanimity as to its occurrence under natural conditions, was sufficiently conspicuous to be observed more than once, namely in Essex, before it was shot in Sheppey; and may probably have been the bird which Mr. Bartlett knew to have escaped from the London Zoological Gardens, on the 19th of the previous July.

It would have been interesting to have known the exact particulars of this escape, how it came about, it had been a guide by which to comprehend the question of the escapes of the larger birds; at any rate only one appears to have regained its liberty; which last consideration might be taken as valid in some instances, for example that of the Griffon Vulture, for their rejection.

Without doubt, many of the small Foreign birds escape from confinement. More than once when visiting dealers' shops, I have seen them loose, and flying about; and this makes it the more surprising that, (considering what *absolute proof* has been required of the natural

occurrence of certain birds): *Turdus Atrigularis*, and *Emberiza Pusilla*, should have got themselves enrolled by an almost universal consensus: as to *Emberiza Rustica* it is even recorded by Professor Newton as being known to have escaped from its cage in April, 1870, in England.

'*Atrigularis*' and '*Pusilla*' are admitted to the British Ornithologists Union List, published in 1883, *upon only one occurrence*: whilst the *cumulative evidence* for the admission of the Great Black Woodpecker is bowled over by our Naturalists, as a man might bowl down thirty nine-pins, one after the other.

Still more surprising is it that certain birds should have been mentioned, even for rejection, upon what seems an authoritative list of our birds: as the Nonpareil Finch (*Cyanospiza Ciris*), which has been brought over almost in flocks from America; and of which probably many have escaped from the dealers' shops; the only reason for its record may be its early occurrence in the Century (1802), when perhaps it may not have been so common an introduction as it is now. The Mocking Bird also is printed only to be justly dismissed in the brief words "*Specimens imported in cages occasionally escape, but there is no authentic instance of this North American Bird having occurred wild in Europe.*"

African Finches are imported in thousands, yet the escape of one, in 1853, *Crithagra Chrysopyga* has been allowed to disfigure this List by its notice and dismissal, the mention of *Sterna Bergii* also, whose record was a joke, which was also a fraud, serves no good purpose.

Sabine's Snipe is treated as a melanism of that bird, under the heading "Common Snipe," and it is a pity that the 'Bimaculated Teal' has not been referred in like manner, as a hybrid, to the paragraph upon the 'Teal.'

The occurrences of the Alpine Chough, in 1881 and 1882, are not noticed at all.

Of birds which have been from time to time recorded, and rejected, which would with little or no probability have been kept in confinement from the nature of their food, and other causes; there are one Vireo, one Fly-catcher, three Swallows, one Martin, one Bee-eater, and one Roller.

How is it with *exotic Mammalia* which are quite as likely to escape from confinement as Birds, are they recorded with even comparative frequency as 'occurring' in these Islands.

There is also the consideration of *brief, and easy Reference* to individual species; to which end, is it not to be desired that the American system, or some system on the same lines should be adopted: all their birds are known immediately by the *Number they bear on their List*; and if, later, another kindred bird has to be introduced a *distinguishing Letter* is added; thus

The Snow Goose (Chen Hyperboreus), is 591.

The Lesser Snow Goose of Cassin (Chen Hyperboreus Albatus), is 591a.

Four Buzzards, 436a, b, c, and d, have been added after No. 436, Buteo Borealis.

Our Bird List, however, is not likely to be so largely added to, as to have the natural objection raised to this plan: no doubt the system, if having its convenience, is open to objection. The egg collector has been one of those most accommodated, it being so simple, and so *less disfiguring* to write 591a on an egg, in place of 'Cassin's Snow Goose,' especially if it is to be done in indelible ink, as has been insisted upon by one of our legislators.

I would venture to suggest that if, in course of time, the Monograph of the Birds of the World, drawn up in his Catalogue of Birds of the British Museum, by Mr. Sharpe

were numbered ; by recognising on the British List their numbers, as Birds shall stand upon the World's list, the above difficulty would be obviated ; and the American accommodation enjoyed by the British Collector of Birds, or their Eggs.

The word *Collector* brings me to a matter on which I would venture a few words, which to me seem reasonable.

Mr. Seebohm divides Ornithologists into four classes ; of which the first alone is *ideal* ; he who studies Ornithology from all the four several points of views of the Anatomist ; the Student in the Museum of stuffed birds ; the Literary Man ; and the Field Naturalist.

It is not Mr. Seebohm who condemns either of these as superficially trivial : but I have seen it brought forward, in an American publication, that all credit should be reserved for those alone who, by following the birds into their haunts, enjoy scenery, and gain health. This judgement, probably from one whose speciality it is to do this, shuts out all who have not time, or opportunity, or health, or even youth, even the man who when young, and able, followed, as did Wolley, and Seebohm, the birds from latitude to latitude, through difficulty, and danger, to their extremest northern summer haunts ; he also when old and unable becomes, per force, the mere collector, and library naturalist. According to this, enthusiasm for so charming a pursuit does not exceed the height which the Kentish school boy attains when he goes a trespassing after the eggs of the Goatsucker, in the Archbishop's park, for is not he also a genuine field naturalist in embryo, with, as yet, ambition only to fill the string on which he hangs his treasures ; but which may hereafter carry him to the Antarctic pole.

A collection of bird's eggs ! At first blush there is

a savour of the private school about it. A collection of China! a collection of Paintings! it seems greatly beneath consideration by such comparison : it really is as greatly above; for are they not as clearly evidence of God's design, as China and Painting are evidence of Man's.

It is a collection of *things of the greatest beauty* in form, texture, and colour; and of the most infinite variety and subtlest distinction amongst species; although broadly defining the genera, or families; so subtle that it takes long practice to be able to distinguish with proximate certainty the difference between, for instance, the eggs
of the Grey, Golden, and Pacific Plovers;
of the Common, Redbreasted, and Wilson's Snipes;
of the Trumpeter, and Common Swans;
of the Common, and Parrot Crossbills;
and of many other kinds.

We heard, not long since, of a China plate being bought at an auction, for something under a thousand pounds; it was a matter of surprise: but of not more surprise to some than that the Great Auk's egg should be bought for fifty pounds: yet one was the *work of man*, and could be repeated to-morrow; the other is the *work of God*, and, thanks to man, *can never be repeated*.

It has been said that the egg collector is only desirous to have more, and rarer, of his pretty bead-like toys than his neighbour.

This is taking for granted that his pleasure in his collection is solely in their pretty appearance, as they lie in artificial nests; but it is possible that what really is attractive to him and to those to whom he shows them, is their connection with those exquisite creatures which enliven his walks, cheer his heart, announce his summer season, and render his landscape ten thousand times more charming by their moving, noisy presence; as every

person who lives by the sea-side can testify that it does during the close season, when the selfish gunner's hand is stayed, who, for his own short hour of private gratification, has made the coasts a desert during the rest of the year for a whole town-full of his neighbours, who would have taken infinite delight in the presence of those beautiful living things, whose absence renders every landscape a comparative blank.

The desire is condemned also in the collector to have more and rarer than his neighbour, and this is imputed as a low ambition, yet it is *ambition*, and it is so prevalent as to be, if the truth were told, universal; but *without ambition* nothing would go forward in art, or in science: *curiosity alone* would not be sufficient to sustain men. If men had none to whom to show, or explain their treasures, and inventions, they would soon cease to collect, or invent. If everybody had the eggs of the Knot, and Solitary Sandpiper there would be no more pleasure in possessing them, and in showing them; than in possessing the eggs of the American Robin, and the Hedge Sparrow.

The *difficulty* in getting some of the eggs is the charm which set Mr. Seebohm his task, to procure the unknown eggs of six well-known birds, the Knot, the Curlew Sandpiper, the Grey Plover, the Little Stint, the Sanderling, and Bewick's Swan; which has resulted in the production of two of the most delightful books which have enriched the subject, being second not even to Wolley's Egg-work.

The difficulty, nay the *present impossibility*, for curiously enough this is the only collection that can be made, I believe, which to make complete, the collector is bound to possess that which no human eye, so far as has been recorded, has seen, and yet which can be

proved to demonstration to exist ; let us say the egg of the Solitary Sandpiper.

It is a collection also which can be enjoyed, when almost complete, in a *reasonable compass*; as can medals, coins, and enamels.

The collector of Pictures, with even a noble house, and a noble income, might prefer to have examples of Paolo Veronese, or Murillo ; some might even desire Rubens, and Snyders ; but for the sake of room has to be content with Ruysdael, Teniers, and Wilkie.

So also the Ornithologist might prefer groups of stuffed birds similar to those now in course of addition to the South Kensington Museum, under Dr. Günther, where one pair of small birds, with their natural surroundings to form a perfect picture, requires many cubic feet of room. These tastes can be, generally speaking, very partially indulged.

There is another advantage in collecting eggs, over the collecting of Birds, it being admitted that rarities are too ruthlessly sought. The egg collector *s pares the birds* ; the bird collector *exterminates* them : he spares them in the hope that they may yet again furnish him with their treasures ; and some who in making up their clutches are not so over desirous that their *whole clutch should be laid by one bird*, will leave one or two of the eggs for the parent's consolation and encouragement.

I am aware that, in a few instances, it may be brought against the bird's nester that he shoots the parent birds for *identification* ; as in the case of the Little Stint ; yet this is only necessary in case of almost indistinguishable eggs which after all are very few ; and in this particular case, Mr. Seebohm having convinced us that the eggs of *Minuta* are not in the least like the eggs of *Temminckii* ; which are still doing duty for them in many cabinets ;

the necessity to do so ceases to exist: and moreover it is a very different thing, for *genuine scientific purpose*, to shoot an extremely common bird within the Arctic circle for the sake of identifying the eggs, and which would also serve as an article of food, from shooting the one Devonshire Nightingale, in full song, to prove that it had so sung, in that unusual county; which thing was actually done, and triumphantly recorded in one of our Naturalist periodicals.

Thus a gentlemen records in the Zoologist (p. 2528), the discovery of four Night Herons near Ermebridge, in Devonshire, May 23rd, 1849, all of which he succeeded in "bagging;" about a week later, from information he received, he renewed his search, and killed two more and on the 22nd June, two more were secured: was any comment made upon this in the periodicals devoted to those who profess to be *lovers* of birds.

It was by shooting the parent birds that many eggs were at first identified; few are the eggs which cannot now be labeled by experienced judges; the Nutcrackers for example; I doubt greatly that the Jackdaw, Jay, or Magpie could lay an egg that an experienced Naturalist should mistake for this bird's. But the difference between eggs of the Chough, and of the Alpine Chough is so indistinguishable, that only from a most reliable source would one accept the former; it ought, of course, always to be the larger, but is it?

As to *what sources*, whence eggs are procured, are reliable, we are obliged to put faith in reliable persons; who in turn must trust to their collectors being reliable: without this we could scarcely get together two-thirds of our desiderata.

In every collection that I have seen the collector has had to thus rely for some of his rarest specimens: it is

quite impossible for every person to track the egg and the bird to their authenticity as Seebohm tracked his Bewick Swan on the Siberian Tundra. If we are to have the egg of 'Mc. Queen's Bustard,' and 'Pallas' Sand Grouse,' we must trust Herr Tancrè, and he his collector; we cannot all visit Turkestan. I have been told, I cannot vouch for the truth, that to hunt for the egg of the Courser, on its Algerian plains, one would require an escort of soldiers for protection.

I have said almost all eggs can be discriminated by experienced persons; and to this end Mr. Seebohm's admirable work is valuably subservient; his system of *comparison of one egg with another*; both as to the likeness or the dissimilarity is especially useful. One would have liked more notice taken of the texture of certain eggs.

And here the, otherwise almost perfect, illustrations sometimes fail, the glossiness, or dulness were quite within the artist's means of representation; it is true that some eggs of the same species are glossier than other some; but in my limited collection (I have but full clutches generally, rarely a series, and therefore here, as everywhere else, I speak under correction), the Charadriidæ are (with the exception of the Dotterel), and notably the Pratincole is, much less glossy than the Scolopacidæ; compare the Killdeer, and Ringed Plovers; with the Common and Spotted Sandpipers; and then compare the illustrations.

Mr. Seebohm apologises for the illustrations; there is always the difficulty of accurate representation in the matter of hand portraiture; and the further difficulty in mechanical transfer, for multiplication of the copies for publication; but, with a few exceptions, which may mainly be put down to the transfer, this apology is not needed. The eggs are exquisitely rendered; and in ad-

vance of anything I have hitherto seen in my opinion ; to select a few that are most excellent, those of the Gulls, and Skuas, perfection being reached in Bonaparte's Gull, and Richardson's Skua, they seem to lie on the page, *alti-relievi*. On the other hand the Accentor's eggs are glossy as, or glossier than the Redstart's, and Chat's : and the American Cuckoo's, which have no gloss, are as glossy as may be ; and the calcareous look, which they seem to share with the Cormorants to some extent, is not at all suggested.

At any rate the drawings are the work of an artist who has "drawn the ball." I remember a water colour Artist, of established renown, going to Carey's Academy to learn drawing, he decided to begin at the beginning ; and he spent nearly a week upon "the ball." After that he used to say "his eyes were opened," and, when inspecting pictures, he could always tell whether the artist had learnt to draw "the ball."

Mr. Seebohm says that one reason why he has not given illustrations of the birds themselves is that the "pretty" woodcuts in Yarrell disheartened him ; I believe he is in earnest here ; but I would suggest this feeling to have been a misfortune, the few later drawings added to Yarrell are good ; witness the Flamingo ; but this praise cannot be accorded to the old illustrations ; in the first place very many of them look as if they were taken from stuffed birds forced into unnaturally graceful positions.

Persons must have been often in nature struck with the stiff stilted look of the Herons, Gulls, and Plovers in repose ; standing on legs like slender posts ; as the idea is given in the Flamingo's picture alluded to. Compare the Herons in Yarrell ; compute the size of the heads of birds, especially of the Falconidæ and Anseres, with their bodies ; look at their grasp on their perches or ground which

the feet of many birds have, or rather have not ; observe how, against the canon of art, the dark part of the birds is forced forward by a light background ; the light, by a dark ; what a knife-like edge their feathery outlines have.

How different is the work to some of that in Mr. Dresser's 'Birds of Europe;' how different to Wolf's work, on the walls of the Zoological Gardens' Museum ; of course I know there is only one Wolf.

Is there anything in those volumes of Yarrell equal to the charming little vignette "the Common Sandpiper's Nest," in Seebohm's book.

To see the advance in art compare the vignette at the end of the article on the 'Puffin,' in Yarrell.

Yet certain excellencies, or exceptions may be found in one, as the Night Heron ; and in the other, as the behaloe'd eggs in the Pheasant's nest.

The pictures in Yarrell have doubtless an attractive prettiness, but I do not believe that (although my stuffed birds do so) Owls in repose shew their shanks as they do in his work, and in Museums.

To one interested in the branch of Oology, and my own attention, more devoted to field Entomology, reverted two years ago to an old love long in abeyance, and not now to be practically studied in the field :

To one interested in this study, Mr. Seebohm's book is invaluable, if after having access to it, persons, even tyros, continue to be taken in by dishonest men, it must be their own fault, because what may be taken for warnings against being deceived by specious misrepresentation, and the prevalent substitution of varieties of common eggs for rare eggs of price, are continuous through the work.

It is an absolute fact that in more than one establishment in a great thoroughfare running east and west in

London, you can for a comparatively small sum, for four or five shillings each, buy the eggs of the Andalusian Hemipode, Buffbreasted Sandpiper, Knot, Curlew Sandpiper, and many others nearly as rare, and the Little Stint for £1, and, after an interview with some friend who understands the subject, find yourself in possession of small Quail's eggs, and varieties of Redshanks and Snipe's, and the yellow type of Temminck's Stint; the value of all which may reach 2s. 6d.

This system, for it has survived sufficiently long without practical exposure to be called a system, is not confined to London (though elsewhere it may partly be the result of ignorance in the dealer himself), and is well known, not only in the trade, but by any private collector of experience, but it is not known to the school boy who has saved up his pocket money with view to become possessed of some special rarity, which he has long coveted.

It is fortunate that there are persons in whom confidence remains unshaken, as Mr. Marsden, Mr. Doncaster, Herr Möschler, Herr Schlüter, Mr. Pember, Mr. Abbott Frazar.

It might be said "let young persons buy their own experience:" but I was too much bitten myself, when at the University of Cambridge, to view that process of purchase with any complacency, or even patience; and I should be delighted if any word of mine were useful to protect the shallow pocket of unwary youth.

In my University days you might visit the fens of Cambridgeshire, and Huntingdonshire, and the broads and coasts of Norfolk, and come back, as I have done, with the spoils of the Moor Buzzard, Great Crested Grebe, and Savi's Warbler; and from the fenmen procure British specimens (mine are still unfaded) of the Redshank, Oyster Catcher, Avocet, Reeve, Kite, Montagu's, and Hen

Harriers, Black-tailed Godwit, Norfolk Plover, Bittern, eggs which I believe can hardly be procured there again, owing to the system of drainage of the fens, which has extinguished another old friend, the magnificent British insect, the Large Copper Butterfly.

But this is not all you could get, for you could get taken in gloriously by purchasing eggs in the town, received no doubt from honest fenmen as Reeve's, Snipe's and Redshank's; and retailed, according to their variety, under the high sounding titles of the rarest Limicolæ.

The mention of their titles reminds me that I have often wondered that an authoritative list has not, so far as I know, been published which has all *the Synonyms of the various birds*, this want, severely felt in the B.O.U. List, is made up for us in Mr. Seebohm's admirable work.

In that list to which I refer not even the *single* synonym upon which the Americans have fixed for *their own birds* is quoted; a publication which is a bare List, or little more, might well have satisfied this want: but one must decide from other sources whether 'the Lesser Scaup' be the 'Little Blackhead' of its native land: 'Totanus Solitarius' be 'Rhyacophilus Solitarius;' 'Puffinus Obscurus' be 'Puffinus Auduboni.'

To identify the species on this list, with those on European, and American lists one must turn to Seebohm's volumes.

There is one excellence however; which requires to be carried much further, *the translation of the classical nomenclature*: for much there is beyond the speculation of even a fair scholar, as the clumsy word Podilymbus with its surprising origin, which however is explained, and the nomenclature of the Alcidæ also explained.

Why in this list are *proper names*, used specifically, allowed but a small initial letter, boysi, adamsi, wolfi;

why should not the same rule prevail for our Avifauna which has been acted upon by the Oxford and Cambridge Entomological Society in their "Accentuated List."

There the specific, as well as generic names have capital initials; thus Dale's insect is not *Plutella dalella* but *P. Dalella*. If rendered in English the incongruity would be apparent. It is no great wonder that the origin of 'Hippolais,' and 'Pomarinus' is lost in obscurity, future generations of ordinary readers which know not the name of Hume may ponder vainly over *humei* and *humii*. Which of the Muses is it that presides over derivatives and is answerable for the changes in the letters from the Greek which we meet with in English-spelt words: and who would recognise, at first blush, a Foochow Woodpecker in *M. fokiensis*!

Besides the question as to what Birds should be admitted to the British list; upon which, as will be seen, our chief authorities are not agreed.

There is also the question as to the *consecutive Arrangement* of Genera, and Species, upon which there is almost more disagreement.

It has been said that the eggs themselves by the similarity of their appearance should go some way towards suggesting the order of the Families.

Some eggs however seem to be very aberrant; thus the eggs of the 'Rufous Warbler,' are very unlike the rest of the British Warblers; one from my clutch from the south of Spain, comes very near in appearance to the egg I have of Richard's pipit (South Siberia, Severtzow). Whilst among the white eggs of the Hirundinidæ the twice spotted eggs of the Swallows cannot be accounted for on the theory of the Common Ancestor.

In size, texture, colour, markings, and general effect the eggs of the Pipits *lie between* the eggs of the Wagtails,

and Larks ; and in this order Yarrell arranged them ; and Newton has not disturbed ; this order also Mr. Seebohm follows.

But the B.O.U. List has introduced the Shrikes, Martins, Finches, and Crows between the Pipits, and Larks.

Alluding to the way in which the birds have been placed, and displaced, in and from the divers Genera ; Mr. Seebohm characteristically says of 'Aluco Flammeus,' "*The Barn Owl has been knocked about by modern Ornithologists from genus to genus, until it can scarcely find rest for the sole of its foot.*" Whilst his own views upon the grouping of the genera seem to me to be so perfectly 'the system of common sense' that I venture to quote a short extract from his British Oology Vol. I, p. 146.

"The Owls are a very well defined group of birds ; and are associated, by Sclater, with the Cuckoos, the Parrots, the Birds of prey, the Pelicans, the Herons, and the Ducks: Forbes places them with the Goatsuckers, Rollers, and Beeeaters: Gadow allies them with the Parrots, the Birds of prey, and the Gallinaceous birds. Here again three authorities do not all agree as to any of the families which are allied to the Owls; which I place as my second family ; with the caution to the reader that it may, or may not be related to the families which precede, or follow it. To the ordinary observer the Owls appear to be closely related to the Birds of prey, by the form of their bill, and claws, and by the shape of their eggs ; they appear to be specially related to the Harriers by their facial disk, to the Ospreys, by their reversible third toes, and to the Eagles by their feathered tarsi: it is difficult to believe that all these characters are accidental, and when we find such difference of opinion among scientific men as to their true affinities, it is difficult to avoid coming to the conclusion

that the value of osteological, myological, and other internal characters have been somewhat overrated."

Probably the ordinary observer will gladly subscribe to this system of common sense, but then his opinion is of little more service than to lead him to urge our authorities to endeavour to reconcile their conflicting, and indeed perplexing views.

My purpose in introducing amongst my notices of disputed birds, *the Names of birds which are not disputed, but whose eggs are very rare*, is the hope that so I may in a few instances confirm the knowledge which we already possess, and perhaps even add to it.

If my opinion varies from our authorities in some details, I repeat that I only give my own impression, founded simply upon the single clutches which I possess, seldom from a series; of some of the eggs there is, I believe, elsewhere, no English series; sometimes no clutch; perhaps two eggs, or one, if even that.

I do it also in the hope that I may assist to preserve the inexperienced from the risk which attaches to the collection of birds' eggs, a greater risk I believe than that which attends any other department of Natural History, or Art.





THE GRIFFON VULTURE.

(VULTUR FULVUS.)

Admitted to the B.O.U. List.

Admitted by Professor Newton.

Admitted by Mr. H. Seebohm.

The first bird to be considered stands as an instance of the *liberal interpretation* of ornithologists as to what birds should, or should not, be admitted as British Birds. There has only been one 'occurrence,' *the Irish instance*, and upon this it is admitted by the British Ornithologists' Union in the list of British Birds compiled by their committee in 1883. It is recorded as having been in perfect plumage; the implied argument here is that it was not an 'escaped' bird. It was also in perfect health, and very wild and savage; but it is more than probable that a bird of this species, after tasting the sweets of liberty, would be both savage and wild, in the opinion of its captor; and if it had recently escaped would have been in good condition, even if unsuccessful in hunting on its own account after regaining its liberty, being one of a tribe that alternately gorges and fasts; and any person examining the Vultures in the Jardin des Plantes, and other aviaries, will find many birds in as perfect plumage as their fellows at liberty; indeed more perfect, for Mr. Chapman says "*the claws and feathers*

of the wild birds are much abraded by attrition on the rocks." It appears to me, therefore, that it is eminently a bird whose admission to the list is open to *the objections* which are brought against many of those rejected. However, it is admitted by the Compilers of the British Ornithologists' Union List, on whose Committee many of our first-class authorities appear; by Professor Newton, in his edition of Yarrells birds; by Mr. Seebohm, in his History of British Birds.

THE EGYPTIAN VULTURE.

(VULTUR PERCNOPTERUS.)

Admitted to the B.O.U. List.

Admitted by Newton.

Admitted by Seebohm.

The first record of the occurrence of this bird, I think, fairly removes it from the list of *probable escapeds*, for the reason that when the Somersetshire bird was shot in 1825, *another bird*, supposed to have been its mate from the fact that it did not for some few days quit the neighbourhood, had been seen in its company: it seems most improbable that any keeper could manage to lose *both* of his valuable birds *at the same time*. In addition also to a *second occurrence* in Essex, Mr. Mudie, in his 'Feathered Tribes,' states that *two birds* of this species were seen at Bridgewater in 1826. It seems, therefore, to be with propriety that the authorities have admitted this bird to the British list, yet *not as a British bird*.

HIEROFALCO.

Our authorities seem to be at variance whether two, or three species stand upon the British list.

The B.O.U. List gives three: Hierofalco gyrfalco; H. Candicans; and H. Islandus.

Professor Newton gives two: Falco Candicans; F. Islandus.

Mr. Seebohm gives two: Falco Gyrfalco; F. Candicans; and two intermediate forms: F. Gyrfalco—Candicans; and F. Candicans—Gyrfalco.

Of these it would appear that F. Gyrfalco is the Norwegian form; F. Candicans the Greenland; and F. Islandus the Iceland.

The occurrence of F. Gyrfalco mentioned in the B.O.U. List is *not alluded to*, I believe, by Newton. Seebohm says that the example was immature, *was shot at Orford*, in Suffolk, on Oct. 14, 1867, by Mr. George Hunt, in the act of devouring a hen.

My eggs of F. Gyrfalco from Torn Lapland, have rather more gloss than those of Candicans, and Islandus; from Greenland, and Iceland.

RED-FOOTED FALCON.

(FALCO VESPERTINUS.)

The eggs of this bird in my collection approach nearer to the Lesser Kestrel in size and colour, than to the Kestrel, or Merlin. They are from Ungarn and Megara, the average of five eggs is 1.42 by 1.22. Wheelwright says they are smaller and rounder than the Merlins. His description is the nearest to my eggs that I have seen.

THE LESSER KESTREL.

(FALCO CENCHRIS.)

*Admitted to the B.O.U. List.**Rejected by Newton.**Admitted by Seebohm,*

who gives the history of the York bird.

The account of the occurrence of the Lesser Kestrel, at Dover, appeared in the Zoologist for 1877. Mr. C. Gordon, of the Museum at Dover, states that Mr. E. P. Robinson had lately presented the Museum with a specimen of this bird. It had been caught alive by a labourer, and kept alive for some time at a farm near Dover; it was an adult male, and one leg having been injured led to its capture.

THE SWALLOW-TAILED KITE.

(ELANOIDES FORFICATUS.)

*Admitted to the B.O.U. List.**Admitted by Newton.**Admitted by Seebohm.*

This bird was rejected by Mr. Dresser from his Birds of Europe: being an insectivorous bird it might be thought strange that it should visit this country; this might be if we accepted the idea that birds visit us *from choice*, and not the compulsion of winds and storms. Moreover it is known to feed on frogs and snakes, it is also said to be a local bird, but Brewer says, it is "*a great wanderer*."

Professor Newton says, there is *no room for doubt* of the Yorkshire occurrence.

Mr. Seebohm says, "its claim to rank as a British bird rests upon the *undoubted capture of two specimens*."

Both Authors narrate the capture of the Yorkshire bird. With reference to the Cumberland bird, the occurrence of which was published in his list of Cumberland birds by Mr. Birkbeck, Mr. Buchanan *at the time* challenged Mr. Birkbeck for his authority and asked for details. Mr. Birkbeck gave the information that the bird had been seen for some time, but evaded the gun; at last a man named Lister having observed that it nightly roosted on a certain spot, set his gun in the daytime exactly covering the spot; and pulling the trigger at night secured the bird; which he gave to Mr. Harrison, the date being April, 1853. *Mr. Birkbeck expressed his sorrow at the man's success.*

In Davie's check list of N.A. birds the eggs are set down from four to six. 1.90 by 1.50 inches.

As to the number in a clutch, Mr. Singley, writing to me from Texas, says that he has taken seven sets of eggs, and young; and always, with but one exception, found *two in a nest*; the number given by Mr. Buckley's correspondent. Nor does the size, or shape as given by Davie agree with Audubon who says they are spheroidal; and Brewer who says "nearly spheroidal," $1\frac{3}{8}$ by $1\frac{9}{16}$. Davie's list is in course of republication when his errors concerning the Swallow-tailed Kite will certainly be corrected.

The eggs are exceedingly beautiful, a pair which I possess are nearly spheroidal 1.82 by 1.47, warm white, magnificently blotched deep burnt sienna; one very generally, the other more zonally towards the smaller end.

They were taken by Mr. J. A. Singley, at Giddings, Lee Co., Texas, April 25th, 1885, the nest composed of large sticks, and green moss, lined with moss, measured, outside diameter, 18 inches; inside diameter, 10 inches; outside depth, 12 inches; inside depth, 5 inches. It was

built in a Pecan tree, 87 feet from the ground; and almost at the end of a bough 22 feet in length. *It was necessary to shoot the female bird to save the climber from her attacks.* Brewer describes the nest of this bird under very similar circumstances: he says, N. A. Oology, 1.39, that Dr. Kolluck had made repeated efforts to get the eggs of this bird; he took a nest in May, 1855, on a large tree, not near the trunk but on a projecting branch; unfortunately the eggs were hatched: Brewer was therefore compelled to publish his work in 1857, *without an illustration of this egg.* He says the nest twigs were intermixed with the long Spanish moss peculiar to the Southern States. In speaking of the Mississippi Kite, *Ictinia Mississippiensis*, he says a pair, whose nest was being robbed by a negro sailor, manifested the greatest displeasure, *and continued flying with remarkable velocity close to the man's head, screaming and displaying the utmost rage."*

THE BLACK-WINGED KITE.

(*ELANUS CÆRULEUS.*)

Rejected from the B.O.U. List.

Not noticed by Newton.

Not noticed by Seebohm.

Mr. Bree alludes to a British occurrence in his *Birds of Europe*.

Mr. Dresser introduces it into his *Birds of Europe*.

Besides the occurrence adverted to in the B.O.U. List, and which is thence rejected (the bird namely shot at Harristown, near Beauparc, County Meath, Ireland, about 1862). *There is the bird shot by Mr. Horan*, which was received whilst yet freshly killed by Dr. Nicholls

about 1845, and by him given to Mr. Dillon, in whose possession it remained up to the time of its record.

Two eggs, *taken by Layard*, on the river Berg, in South Africa, which I have received from Mr. H. E. Dresser are like Kestrels; one being rather larger and one smaller than the eggs of that bird: in both, the colour looks abraded, and appears as though it should have the deep clouded richness of the Honey Buzzard; they are without the freckled look of the Kestrel, and Merlin.

THE LESSER SPOTTED EAGLE.

(AQUILA NÆVIA.)

Admitted to the B.O.U. List.

Admitted by Newton.

Admitted by Seebohm.

The B.O.U. List admits 'A. Clanga,' the Spotted Eagle, but gives as a synonym 'A. Nævia,' of Newton, which bird Seebohm calls 'The Lesser Spotted Eagle' this seems to imply that their opinion is that *they are but one species* describable as 'Clanga' or 'Nævia' interchangeably.

Newton, Vol. 1, p. 23, gives no opinion whether of the Ornithologists who look upon the birds as two races, or two species is correct. Seebohm states that '*they are but local races,*' Vol. 1. p. 107, but from the context I am not sure whether he is referring to 'Clanga' and 'Nævia,' or to 'Fulvescens' and 'Hastata,' or to all the four forms.

Both these authorities refer the Cornish occurrences to 'Nævia,' *the lesser form*. Mr. Gurney, however, who is supported by Mr. Dresser, refers them to the longer form 'Clanga,' it seems to be mainly a question of the

measurement of the length of the wing, which in 'Nævia' sometimes reaches 20 inches; in 'Clanga' always, or exceeds 20 inches (males.)

The Spotted Eagle is recorded by Mr. H. T. Archer as shot this November, 1885, on the Northumberland coast, Mr. F. R. Surtees calls it 'Nævia,' but as he only quotes Mc. Gillivray, Bewick, and Selby, he may not be aware of the controversy concerning 'Nævia,' and 'Clanga.'

THE SPOTTED EAGLE.

(AQUILA CLANGA.)

Admitted to the B.O.U. List.

Omitted by Newton.

Omitted by Seebohm.

Admitted to the B.O.U. List, but apparently regarded as synonymous with 'Nævia.'

'Clanga' by Newton is not defined, nor as a British occurrence discussed.

Seebohm omits it from place and figure, but seems to consider 'Clanga' and 'Nævia' *varieties of the same species*; of which 'Clanga' his large Spotted Eagle, is *constantly* the largest bird: he says that the British occurrences have been *the smaller form, excepting possibly the first Cornish occurrence*, the wing reaching the required minimum of 20 inches; (the Irish bird fell short by a quarter-of-an-inch) "it may be a large male 'Nævia' or a small male 'Clanga.'"

There is room for conjecture in the fact that the Cornish birds of 1880-1, were shot in that County at an interval of 11 months: were the birds mates? *if so surely not escaped*: did one *linger* so long about, or *return* to the scene of the other's destruction; or was it a coinci-

dence that time and place of the only English occurrences so nearly adhered. My eggs taken in Pomerania, April 4, 1878, are slightly larger than my eggs of *Nævia*; and are well described as small Golden Eagle's Eggs.

THE RED-SHOULDERED HAWK.

(*BUTEO LINEATUS*.)

Rejected from the B.O.U. List.

Noticed by Newton.

Noticed by Seebohm.

Professor Newton says '*Buteo lineatus*' the Red-shouldered Buzzard is recorded (Ibis, 1865) as having *once occurred* in Scotland.

Mr. Seebohm speaking of *Lineatus*, *Borealis*, and *Desertorum*, says there is no evidence to shew that these birds had not escaped from confinement, nor is it certain that the identification was correct.

This bird is said by Brewer to be a resident throughout the United States, except where it is replaced by the Red-bellied Hawk, (*Buteo lineatus elegans*) It is abundant in California, South Carolina, and Florida; it was not met with in the Arctic regions by Sir John Richardson, latitude 50° being probably its northernmost limit; Lieutenant Bland, in his list of the birds of Nova Scotia, speaks of it as common in, and migrating to that province. In the immature form it is the '*Falco hyemalis*' of Gmelin, Wilson, Bonaparte, and Audubon. The eggs are very handsome, and very like those of the Common Buzzard; my own clutch were taken June 4, 1882, but I prefer to give the dimensions as quoted by Davie in his Check list of N.A. birds, 2.20 by 1.75 inches; the nest is placed in lofty trees, and a clutch is three or four.

THE RED-TAILED HAWK.

(BUTEO BOREALIS.)

*Rejected from the B.O.U. List.**Not noticed by Newton.**Noticed by Seebohm,*

who conjectures as above that the *three species of Buteo there mentioned may have been let out of confinement by their keepers*. With reference to the testimony in favour of the occurrence, Mr. Felkin, of Lenton, near Nottingham, stated in his list of Nottinghamshire birds (1866) that a Buzzard which had been killed in the Autumn of 1860, between Mansfield and Newstead, had been submitted whilst in the flesh to *Mr. Gould, who identified it as 'Buteo borealis.'* This is the account given in Sterland's and Whitaker's List of the Birds of Nottingham (1879.)

It has a wide range through North America, extending to the fur countries, according to Sir J. Richardson, and is the commonest Hawk in Jamaica. Mr. A. Fowler gives an interesting account of a nest taken in Danvers, Mass. "B. Borealis usually begin to build their nests about April 1. They select some tall tree near the middle of a wood, the branches of which form a crotch near its trunk. To this chosen spot the female carries a sufficient quantity of sticks for its outside; the male taking no very active part in the matter; and for its inside she uses the dead bark from the branches of the chesnut, which she beats and picks to pieces with her bill, making it soft and pliable; or gathers the fallen leaves of the pine, or some other soft material, which she finds convenient as a lining, which is about 1 inch in thickness: it is 13 inches in outside diameter, and 7 inches in inside diameter, which is $2\frac{1}{2}$ inches deep. The female usually

lays five eggs, which are spherical, of a dirty white colour, and marked with large blotches of brown, some marked mostly at the larger end, some almost covered, some of even the same litter almost white, $2\frac{1}{2}$ by $1\frac{3}{4}$." My own clutch being rather larger than those of *Lineatus* confirm these measurements.

THE AFRICAN BUZZARD.

(*BUTEO DESERTORUM*.)

Rejected from the B.O.U. List.

Noticed by Newton.

Noticed by Seebohm,

who, as above, dismisses '*Lineatus*,' '*Borealis*,' and '*Desertorum*,' as having possibly escaped from confinement.

Professor Newton says: "From information received from Mr. Gurney it appears that an example of *Buteo Desertorum* (Dandin), a species of extensive southern and eastern range, has been killed in Wiltshire; but as yet no record of the fact seems to have been made public."

Mr. J. H. Gurney writes in the *Ibis* for 1876 that Mr. Gould, in his introduction to his magnificent work on the Birds of Britain, "mentions a Buzzard (*B. desertorum*) which had been killed at Eversley, in Wiltshire, September, 1864. This specimen he kindly permitted me to examine when in his custody some years since, and then it appeared to me to be no different to ^{double bird} what it was *Desertorum* immature." Mr. Gurney also writes there are two which he considers British specimens; the Bywell bird of 1830, which is in Hancock's museum; and the Tynemouth bird of 1870, which is in the Newcastle museum. My clutch of four eggs are rather smaller than

any other Buzzard's eggs, even than those of 'Sancti Johannis,' to which in marking they are very similar, the marks being small and thin. An average egg of Desertorum from my clutch is 2.30 by 1.71. They were taken at Sarepta, May 10, 1883.

THE AMERICAN ROUGH-LEGGED HAWK.

(ARCHIBUTEO LAGOPUS SANCTI JOHANNIS.)

Rejected from the B.O.U. List.

Unnoticed by Newton.

Unnoticed by Seebohm.

The B.O.U. List states that the Devonshire occurrence "proved to be merely a dark variety of Archibuteo Lagopus."

The bird ranges throughout the whole American Continent; but during the breeding season retires to the more northern parts. Brewer states that he was told it was then common on the Labrador coast. Davie states that it breeds both on trees and rocks, and that the eggs are 2.10 by 1.74 inches. The drawing given by Brewer is $2\frac{1}{16}$ by $1\frac{1}{16}$ inches; and he says that it approaches in size and appearance to an egg of B. Lagopus from Switzerland, measuring $2\frac{1}{8}$ by $1\frac{1}{8}$ —here is considerable difference in size. A clutch of three in my possession, taken at Okkak, Labrador, June 17, 1883, are not in the least like my eggs of the European Rough-Legged Buzzard, taken in Lapland, May 30, 1858, and June 16, 1864, but are very distinct; they appear considerably smaller, and two of them are, for Buzzard's eggs, slightly pyriform; they are also bluer in the ground colour, and more weakly marked, like eggs of 'Desertorum'; they average 2.16 by 1.71 inches. My eggs of Lagopus average 2.28 by 1.83.

THE AMERICAN SPARROW HAWK.

(TINNUNCULUS SPARVERIUS.)

Is not noticed by the authorities. A specimen of 'T. Sparverius' was shot by a gamekeeper of the name of Hague, and is in the possession of Mr. Backhouse, who verified the story at the time. It was exhibited by Mr. Seebohm at the proceedings of the Zoological Society, Feb. 5, 1884. *Two birds were shot* at Helmsley, Yorkshire, one of them, however, was never retrieved. Does not the fact that there were *two birds* seen at the same time and place *prove, so far as such things can be proved*, that they were not 'escaped birds.'

The American Sparrow Hawk lays its eggs in hollow trees; they are five, 1.35 by 1.13. The five eggs which I possess are very pale, and have much more the appearance of 'Falco' than 'Tinnunculus', being like small pale varieties of F. Cenchris. They were taken from a hole in a tree by Mr. H. A. Mason, on May 27 and June 4, 1884, at Helena, Montana. They are nearly spherical.

THE AMERICAN GOSHAWK.

(ASTUR ATRICAPILLUS.)

*Admitted to the B.O.U. List.**Noticed by Newton.**Admitted by Seebohm.*

Professor Newton admits that "*three examples* of this bird, two of which were adult females, have been killed in the British Islands," also that it is "an allied yet distinct species." *from* 'Palæmbarius

My eggs from America are indistinguishable from those of the Palæarctic form.

THE AMERICAN HAWK OWL.

(SURNIA FUNEREA.)

Admitted to the B.O.U. List

as a distinct species from the European Hawk Owl, (Ulula) of the B.O.U. List.

Admitted by Newton

as Surnia Funerea, ranging through the more northern regions of both hemispheres, from Kamschatka to the Fur Countries of North America.

No allusion is made to any opinion that 'Ulula' and 'Funerea' *may be* distinct forms.

Admitted by Seebohm

as 'Surnea Funerea' which title he seems to confer on the *European form*.

Although the B.O.U. List publishes two distinct species 'Ulula' and 'Funerea.' Mr. Seebohm concludes that there is *but one species* with three varieties, the European, ('Nisoria') the Siberian, ('Doliata') the American, ('Hudsonia') neither of these names has he adopted for his species. ('Nisoria' he uses for the Barred Warbler.)

Admitting 'Ulula' and 'Funerea' to be *subspecific forms*; he is at variance with Dresser, who says that the occurrence of the *American form* is more clearly proved than that of the *European*; whereas Seebohm says that, of the six occurrences in Britain, he has "seen only one which belonged undoubtedly to the American variety."

So far as their eggs are concerned Mr. Seebohm says they are indistinguishable from the eggs of the Short-eared Owl.

Elsewhere he says that the eggs of the Owls are a point in favour of their connection with the Birds of prey.

My eggs of the Short-eared Owl were received from Harvey, the fenman of Baitsbite when on an expedition into the fens of Cambridgeshire many years ago; if any Owl's eggs approach the Harriers', in one point at least, these specimens do; namely, in the dulness of the texture, and perhaps also in the elongated form.

The eggs of Owls strike me as differing widely from those of the Birds of prey in two points; in glossiness of texture, and in tint, which is milk white; whereas those of the ~~former~~^{latter} are often bluish white in the ground colouring; it is specially so with the Harriers.

My clutch of eggs of the European form 'Ulula,' taken in Lapland, on June 19, 1868, and in 1883, are glossy, and spherical.

The name 'Funerea' is followed, I suppose, in the B.O.U. List as having been settled upon for the American form, by the American Ornithologists in their Bulletin published by the United States National Museum, 1881.

THE SAW-WHET OWL.

(NYCTALE ACADICA.)

Mentioned, to be Rejected, from the B.O.U. List.

Not noticed by Newton.

Not noticed by Seebohm.

THE AMERICAN SCREECH OWL.

(SCOPS ASIO.)

Mentioned in the B.O.U. List.

Mentioned by Newton.

Mentioned by Seebohm.

The three authorities simply notice the two reported

occurrences in Yorkshire, and Norfolk; the latter gentleman considering the evidence unsatisfactory.

My clutch of five eggs of this bird taken by Mr. W. H. King, at Eagle Rock, Idaho, North America, May 24, 1883, are very beautiful; they are round, and very glossy.

Davie gives the size 1.38 by 1.19, pure white, and nearly round; a clutch being from five to seven. (Check list to North American birds.)

It is the Mottled Owl of Brewer (N.A. Oology.)

THE SIBERIAN GROUND THRUSH.

(*GEOCICHLA SIBIRICA.*)

Rejected from the B.O.U. List.

Noticed by Newton,

who says there is "an absence of all details in the capture" of the single occurrence,

Described by Seebohm,

who says the evidence for the occurrence is not very satisfactory.

This is surely tantamount to rejection by the three authorities.

THE BLACK-THROATED OUSEL.

(*MERULA ATRIGULARIS.*)

Admitted to the B.O.U. List on one occurrence.

Admitted by Newton on one occurrence.

Admitted by Seebohm on one occurrence.

THE AMERICAN ROBIN.

(MERULA MIGRATORIA.)

*Rejected from the B.O.U. List.**Not noticed by Newton.**Not noticed by Seebohm.*

This species whose capture at Dover is alluded to, in the B.O.U. List, as having "probably escaped from confinement;" but *whose occurrence is not disputed*; was captured under the following circumstances: and it appears to me that the likelihood of its being a *natural*, and not an '*escaped*' occurrence is quite as great as in the instance of the Black-Throated Ousel; which, on a single occurrence, is shewn above as admitted by our three authorities.

It was seen to arrive from the sea, on the coast of Dover, in so exhausted a condition, that it was driven into a house, and captured alive.

The first theory was that it had escaped from some ship that was bringing birds from America to England, but then these arrive at Liverpool; then, when presented to the Gardens of the Zoological Society, London, Mr. Bartlett found it *so tame* that it was concluded to have been a caged bird escaped. But this theory is also shaken from the fact, that it had been *caged six months* before Mr. Bartlett received it. There is an account of its capture in the Zoologist for 1877.

The well known blue eggs are of unsurpassed beauty.

THE DUSKY BULBUL.

(PYCNONOTUS BARBATUS.)

*Rejected from the B.O.U. List.**Rejected by Newton.**Not noticed by Seebohm.*

THE GOLD VENTED BULBUL.

(PYCNONOTUS CAPENSIS.)

*Rejected from the B.O.U. List.**Admitted by Newton.**Rejected by Seebohm.*

The B.O.U. List says of the occurrence "one is said to have been shot near Waterford, Jan. 1838." And prints the name in italics as not admissible.

Professor Newton gives the history of the specimen in the Museum of Trinity College, Dublin; and seems perfectly satisfied of the genuineness and authenticity of the occurrence.

On the other hand Mr. Seebohm remarks that the authenticity of a Cape bird in Dr. Burkitt's collection, is shaken by the fact that another Cape bird 'Bubo Capensis' was found therein labelled "Bubo Maximus shot in Ireland." The argument being that as there was an error in one case, there might be in the other—but is it not possible that 'B. Capensis' may have *also really been shot in Ireland*, and *mislabelled* 'B. Maximus,' not having previously attracted the criticism of a competent naturalist.

An egg which I received from Dr. A. Müller of Frankfort as 'Pycnonotus pygæus' taken at Calcutta, June 22, 1878. I submitted to Mr. H. E. Dresser, and Mr. E. Bidwell; both of whom considered it to be the egg of 'P. Capensis,' it being smaller than 'P. pygæus' or 'P. Xanthopygæus,' it is pale pink, thickly spotted with dark pinky red; it measures .85 by .62.

Is the exact southern range of this bird determined?

BLACK-BELLIED DIPPER.

(CINCLUS MELANOGASTER.)

Admitted to the B.O.U List,
as of *Specific* rank.

Admitted by Newton,
as a *Melanic* form of C. Aquaticus.

Admitted by Seebohm,
as a *Variety* of C. Aquaticus.

The B.O.U. List adverts to the fact that some authorities do not admit the British occurrences to have been *true examples* of 'Melanogaster'; but the authors seem further to deny that even *true* 'Melanogaster' is a *true species*.

Mr. Seebohm considers that the British occurrences of 'Melanogaster' are *immature forms* of 'Aquaticus.' In the 'addenda' to his first volume however he speaks of the occurrence of the *true variety* 'Melanogaster,' a specimen of which he had "just received from Mr. Eagle Clark an undoubted example of C. Aquaticus *var.* Melanogaster, shot at Spurn point in Yorkshire, where it had probably arrived on migration from Scandinavia, as it frequently occurs in Heligoland."

THE BLUE ROCK THRUSH.

(MONTICOLA CYANUS.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

The bird, which is now in the Museum of the Royal Dublin Society, was shot in Westmeath on Nov. 17,

1866, by Mr. B. Knox; and it was believed to be a *genuine occurrence* by Mr. Moore, and Dr. Carter.

It is a bird which has reached Heligoland: a point which Mr. Seebohm *generally considers* in weighing the probability of the genuineness of British occurrences.

And Professor Newton *admits the occurrence*, but does not grant the bird picture or place because its Southern range "*renders its enrolment as a British bird inexpedient.*"

The question is should it be excluded from the roll of *Birds on the British List* which yet can *no more claim to be British than Turdus Atrigularis*.

Eggs in my possession taken in Greece, April 25, 1883, are delicate pale blue and scarcely differ from my eggs of the Rock Thrush.

THE BLACK-THROATED CHAT.

(SAXICOLA STAPAZINA.)

Admitted to the B.O.U. List.

Not noticed by Newton.

Admitted by Seebohm.

Mr. Seebohm gives *ample circumstance* for the enrolment of this bird on the British List.

It is admitted by H. Saunders in his preface to Vol. iii. of 'Yarrell's British Birds.'

THE DESERT WHEATEAR.

(SAXICOLA DESERTI.)

Admitted to the B.O.U. List.

Unnoticed by Newton.

Admitted by Seebohm.

I believe it will be found that there is some confusion of

the synonyms applied to 'Deserti,' and Menetries' Wheatear 'S. Saltatrix.'

A specimen of 'Deserti' shot on the Holderness coast of Yorkshire, on October 17, 1885, was exhibited by Mr. Dresser at the Meeting of the Zoological Society on November 17, 1885. On the authority of Mr. Eagle Clark.

Mr. Seebohm gives good evidence for the enrolment of this bird.

The eggs of 'Saltatrix' are a pure pale spotless blue; those of 'Leucomela,' 'Aurita,' and 'Deserti,' are almost indistinguishable; and must be from perfectly reliable sources and districts, to be accredited.

Mr. Seebohm, who says the eggs of 'Deserti' closely resemble those of 'Stapazina' yet gives the measurement *as smaller*; viz: 'Deserti,' .77 by .49 inches, 'Stapazina' from .8 by .62 to .7 by .56 inches.

I have received it from Dr. Müller as taken in Turkestan, May 10, 1884, and its measurements are .72 by .59 inches; it is pale greenish blue spotted with pale russet brown, smaller than 'Stapazina.'

Admitted by H. Saunders in his preface to Vol. iii. Yarrell's British Birds.

THE WHITE-COLLARED FLY-CATCHER.

(MUSCICAPA COLLARIS.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

THE RED-EYED VIREO.

(VIREOSYLVA OLIVACEA.)

*Rejected from the B.O.U. List.**Recorded in a Note by Newton.**Unnoticed by Seeböhm.*

This is another of those instances where *two examples were taken at the same time and place*; it is highly improbable that they had escaped in company from a cage; moreover it is not a bird probably that would thrive in confinement, if strictly insectivorous; the only question seems to be whether the genuine occurrence is *authentic*. And upon this Professor Newton throws *no shadow of distrust*. Whilst Harting states that *the pair* were trapped by a bird catcher in May, 1859. And that the male is in the collection of Mr. E. Brown, of Burton-upon-Trent: there is an account in Mosley's Natural History of Tutbury.

The eggs are of singular beauty; elongated, purest white, sparsely spotted with claret. My clutch was taken in Philadelphia, on June 14, 1879. The clutch is five, and the nests are built in trees at an altitude of from ten to fifty feet.

 SAVI'S WARBLER.

(LOCUSTELLA LUSCINOIDES.)

Mr. Seeböhm says the eggs of 'Luscinioides' somewhat closely approach those of the Grasshopper Warbler; but are always browner—from .8 to .75 inches in length.

Professor Newton gives a larger measurement .84.

Eggs which I got when on an expedition to Cambridgeshire fens from one of the fenmen (who had just captured the bird) with the nest made solely of sedge, are *decidedly larger* than either the Grasshopper, or Dartford Warblers.

THE BARRED WARBLER.

(SYLVIA NISORIA.)

Admitted to the B.O.U. List.

Exhibited by Newton after the publication of Vol I.

Admitted by Seebohm.

In addition to the occurrence at Cambridge when it was shot by a Porter of Queen's College forty years ago ; and made known for the first time by Professor Newton in 1879 ; and concerning the authenticity of which occurrence Mr. Seebohm expresses himself satisfied.

A second occurrence was recorded in November, 1884, in "Nature" as having been exhibited at a Meeting of Naturalists.

Since writing the above I find in the "Addenda" to Mr. Seebohm's last volume "Two additional examples of the Barred Warbler (*Sylvia Nisoria*) were shot in our islands in 1884, one on the 28th August at Spurn point (Sclater Zool., 1884, p. 489) the other on September 4, at Cley, on the north coast of Norfolk (Sclater Zool., 1884, p. 493.)

Admitted by H. Saunders in his preface to Vol iii. of Yarrell's British Birds.

THE RUBY-CROWNED WREN.

(REGULUS CALENDULA.)

*Rejected from the B.O.U. List.**Noticed in a note by Newton.**Rejected by Seebohm.*

Mr. Seebohm points out that the Loch Lomond skin lay unproclaimed in a drawer for *six years*; which if it was known at any time to have differed from the two British species would scarcely have happened. The B.O.U. List says shot 1852 (P.Z.S. 1858) this fact is significant and points to the justice of Seebohm's conclusion.

THE AQUATIC WARBLER.

(ACROCEPHALUS AQUATICUS.)

I agree with Mr. Seebohm that the eggs are *slightly* smaller than those of the Sedge Warbler: they are also I think *more glossy*. Some of mine have a streak of dark, they were taken at Brunswick, May 10, 1882.

CETTI'S WARBLER.

(CETTIA SERICEA.)

*Rejected from the B.O.U. List.**Not noticed by Newton.**Not noticed by Seebohm.*

THE YELLOW-BROWED WILLOW WREN.

(PHYLLOSCOPUS SUPERCILIOSUS.)

*Admitted to the B.O.U. List.**Admitted by Newton.**Admitted by Seebohm.*

Professor Newton gives the very interesting account of the energy shown by Mr. W. E. Brooks in undertaking a visit to Cashmere to procure the nest, and eggs of this little bird.

Two of these eggs which I have received from Mr. H. E. Dresser; and which were taken at Gulmerg, May 31, 1871, may be described as rather smaller than the Willow Wren, and having spots nearly as deep in tint as the Chiff Chaff.

Mr. Seebohm took a nest of this bird in 1877, at nearly the same longitude, but at a latitude more than 2000 miles north. Mr. Seebohm considers these birds breeding in such different latitudes as allied species.

The Southern bird however seems to have chosen a somewhat *Arctic nursery*; for Gulmerg is described as "a tract of extensive pasture land more than 8000 feet above the sea level, surrounded by pine clad slopes, on one side of which rise snowy mountains."

Does it happen that individuals of some species which, as a rule, migrate north to breed, remaining in their winter quarters, *nest at high altitudes* when their time comes?

Mr. Dresser writes to me "*as regards the so called variety, 'Phylloscopus humei,' I cannot, after a careful examination of a series, endorse the view that it differs from the Northern form; and hold that it is true 'Phylloscopus Superciliosus.*"

My eggs were exhibited before the Zoological Society, January 16, 1872, by Mr. Dresser.

Mr. W. E. Brooks mentions, as a reason for separating the species, the monosyllabic sound as described by Mr. Seebohm; and the sound, slightly varied, which the Cashmere bird uttered: but *different* persons might describe the same short sound differently, he sees also a difference in plumage.

THE NORTHERN MOCKING BIRD.

(MIMUS POLYGLOTTUS.)

Rejected from the B.O.U. List.

Omitted by Newton.

Omitted by Seebohm.

A set of eggs, in my possession, are exactly like small, and handsome eggs of the Ring-Ousel.

THE WALL CREEPER.

(TICHODROMA MURARIA.)

Rejected from the B.O.U. List.

Omitted by Newton.

Admitted by Seebohm.

Mr. Seebohm appears to have established its claim to enrolment on the undoubted authenticity of the Lancashire specimen; of which there is a coloured engraving in Mitchell's "Birds of Lancashire," published 1885.

Mr. Seebohm says that the eggs of the Creepers in colour resemble the Tit's; and yet he points out that

there are grey underlying spots in the Common Creeper's and in the Wall Creeper's which are not found in the Tit's, Wren's and Nuthatch's eggs, a very distinguishing character, implying two processes in parturition.

THE S. KILDA WREN.

(TROGLODYTES PARVULUS VAR. HIRTENSIS.)

Introduced by Mr. Seebohm.

But after a careful comparison with a series of the Wren considered by Mr. Dresser "*not worthy of specific rank.*"

If however as Mr. Dixon says the eggs "closely resemble typical eggs of the Great Titmouse" they are prodigiously unlike the "Wren's" in size, colour, marking.

THE NONPAREIL FINCH.

(CYANOSPIZA CIRIS.)

THE YELLOW-RUMPED SEED EATER.

(CRITHAGRA CHRYSOPYGA.)

Rejected from the B.O.U. List.

These and many such like small birds are brought over from America, and Africa almost in flocks. They escape from cages, and dealers' shops where they may be seen, frequently, flitting about loose; *why were they recorded at all on a list bearing authority.*

THE ALPINE CHOUGH.

(PYRRHOCORAX ALPINUS.)

*Omitted from the B.O.U. List.**Mentioned by Seebohm,*

in his article on 'the Chough' and a drawing, for comparison, given of its egg.

The Specimen of this bird, which is the one occurrence, was shot near Banbury, on April 8, 1881. The account is given in the Zoologist for 1881-2.

Mr. Seebohm admits the authenticity but questions the genuineness of the *wild* bird as it is one likely to be imported.

It is a smaller bird than the Chough; but some of my eggs, received from the Parnassus, (Krüper) of the Alpine Chough are as large as the type of 'Graculus' received from the Saint Gotthard Pass: they seem to vary greatly in size and both should be well authenticated.

PALLAS' GREY SHRIKE.

(LANIUS MAJOR.)

*Admitted on B.O.U. List, to Specific rank.**Admitted by Newton,*

who says its existence has been doubted.

Noticed by Seebohm,

who states it to be *a variety* of the Great Grey Shrike.

The correct scientific name of Pallas' Grey Shrike is 'Lanius Excubitor v. Major,' he says that the Grey Shrikes with only one wing-bar which are found in England, Scotland, and various parts of Europe are all Pallas'

Grey Shrikes. Of these Gray mentions at least two dozen Scotch killed Grey Shrikes with only one bar. If this be so, distinction in the eggs would be the same with that in the case of the Common, and Ringed-Guillemots; the American, and European Hawk Owls; &c.

The birds themselves by interbreeding, seem to have settled the point; and Mr. Seebohm's view to be correct.

THE AMERICAN GREY SHRIKE.

(LANIUS EXCUBITORIDES.)

Rejected from the B.O.U. List.

Rejected by Newton.

Omitted by Seebohm.

I possess a set of the eggs of 'Lanius Excubitorides' taken 1885, at Los Angelos Cala, *in appearance* they are like 'Excubitor,' *in size* like 'Minor,' their eggs.

THE GREAT NORTHERN SHRIKE.

(LANIUS BOREALIS.)

Omitted from the B.O.U. List.

Omitted by Newton.

Omitted by Seebohm.

The Great Northern Shrike of America 'Borealis' was killed at Aberdeen in 1849. There is an account in the Zoologist for that year.

The eggs of this bird are of the size of 'Excubitor,' but the ground is clearer, and the markings more distinct, not so suffused.

My eggs were taken by Mr. L. D. Shultz, at Lake Winnipeg, on June 11, 1882. The nest, containing five

eggs, was placed 12 feet high up in a balsam tree; the bird was shot from the nest.

THE CEDAR WAXWING.

(AMPELIS CEDRORUM.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

Professor Newton in a note briefly alludes to Gray's account of its appearance in *waters which may be called British*; this bird, according to Gray, joined the ship in Canadian waters, on its flight across the Atlantic, and was carried into Irish waters; but on nearing land changed to another ship Canada bound, on the authority of Mr. Struthers of Lark Hall.

Gray, (in his Birds of West Scotland,) says *one was shot at Cambo, in Fifeshire, in 1841, less than 'Garrula.'*

There is probably no egg which could more readily be *passed off on the unwary* than this for the valuable egg of 'Garrula'; it is however as a rule smaller and brighter than Garrula; at any rate my set of Garrula from Lapland are larger, and the ground grayer and the spots less vivid.

THE RED & BUFF SHOULDERED BLACKBIRD.

(AGELÆUS PHŒNICEUS.)

Rejected from the B.O.U. List.

Admitted by Newton.

Noticed by Seebohm.

Newton, following Yarrell, gives Place and Picture to the bird; he however glances at the *possibility* of the twelve

occurrences being 'escapeds,' and points to the fact that all have been the gay-coloured male; and observes that though the female may have evaded observation; other obscure birds have been detected by the keen eye of the naturalist.

Seebohm says "it is probable that most of them had escaped from confinement."

It is a bird which I have kept in my aviaries and is indeed not unfrequently brought over from America; and sold for seven shillings and sixpence apiece.

If the twelve birds which have been captured in the years 1843-44-63-65-66-66-77 had escaped from confinement they must represent only a *per centage* of escaped birds: as it is impossible to suppose that all which escaped are *recovered*, or if recovered, *recorded*. Are we to suppose that the keepers of these valuable birds are continuously letting out their birds in numbers. It does not seem probable, nor scarcely possible.

THE RUSTY BLACKBIRD.

(SCOLECO-PHAGUS FERRUGINEUS.)

Rejected from the B.O.U. List.

Omitted by Newton.

Noticed by Seebohm.

who says that "A single example was obtained near Cardiff, 4th October, 1881."

"*It was shot by a man who was in the habit of taking birds to Mr. R. Drane, F.L.S., in such perfect condition that the idea of its having escaped from a cage seemed untenable.*" Exhibited by Mr. Seebohm, P.Z.S., December 13, 1881.

The bird had *no marks of confinement*, but I think little stress can be laid on that, as so many birds kept, not in cages, but in aviaries, are habitually seen in perfect plumage, the difficulty far more is the multitude of birds which are supposed on their occurrence to have been 'escapeds.'

These rare eggs which I have received taken at Flag Station, Illinois, 23rd May, 1884, from a willow tree; and by Mr. R. S. Galloway, at Medina, Ohio, 26th May, 1883, when he shot the female at the nest in a willow, differ slightly from the eggs of the Purple Grackle '*Quiscalus purpureus*,' being more blotched, and less streaked; they are also a little smaller, light green, blotched handsomely with purply brown, 1.02 by .75 inches.

Mr. W. E. Cator has reported that three Minor Grakles '*Graculus Religiosa*' were seen near Yarm, in March, 1848, one of them was killed, they arrived on the coast fatigued after two days of strong south east wind.

THE MEADOW LARK.

(*STURNELLA MAGNA.*)

Rejected from the B.O.U. List.

Noticed by Newton.

Noticed by Seebohm.

The three occurrences are mentioned by the List; and *no doubt is cast* upon their authenticity, or genuineness; and *no suggestion made* as to their being 'escaped' occurrences; they are *simply set aside* by the italics which mark rejection.

Prof. Newton treats them on the same principle, and in the same way.

Mr. Seebohm only says "One was seen in Norfolk, October, 1854, and another was shot in Suffolk, in March, 1860, whilst a third was obtained near Cheltenham."

If we compare the good fortune of *T. Atrigularis*, *E. Rustica*, *E. Pusilla*, and many other *single occurrences*, with the fate of the *Rejected 'Icteridæ'*; we shall find matter for reflection.

The Norfolk bird was seen by Captain Jary a careful observer of nature at Walsham.

The Rev. H. T. Frere gives the account of the shooting of *the Suffolk Bird* at Thrandeston, March, 1860, by R. Baker.

The eggs are amongst the most beautiful; my clutch of five were taken by Mr. F. T. Pember, at Granville, New York, 6th May, 1882. Pure white; beautifully spotted with rich red brown, 1.10 by .82. The nests are built upon the ground.

THE PARROT CROSSBILL.

(*LOXIA PITYOPSITTACUS*.)

Admitted to the B.O.U. List.

Admitted by Newton.

Admitted by Seebohm,

as a variety of '*Curvirostra*,' who says "English Ornithologists have for the most part treated the Common, and Parrot Crossbills as distinct species; the facts of nature do not warrant such a conclusion in the least." He speaks of it as the "large form of the common crossbill."

Newton says of the '*Larger Crossbill*' that it has "received specific recognition from the most approved

authors," and "the nest and eggs are *somewhat larger*" than those of 'Curvirostra.'

Wheelwright in his "Sweden" says of the egg:

"*Often scarcely larger than the Common Crossbill's, but always of a bolder character, and is thicker*: the nest of both species is much alike, the full number of eggs appears to be three very seldom we find four in a nest."

One of my eggs which I received in a box labelled, in what I believe to be Wheelwright's handwriting, differs in this fashion from the egg of 'Curvirostra.' The label ran thus "Loxia Pityopsittacus, March 15, 1852, Bacca. on a Scotch Fir, 20 feet, close to the stem, four eggs fresh, little sat on; shot the old hen."

This egg is *bolder, not larger* than my eggs of 'Curvirostra.'

Seebohm says of 'Curvirostra' "the usual number of eggs is *four, but five are sometimes found*," if so, and Wheelwright who had lengthy experience is right that in the case of 'Pityopsittacus' *three eggs are found in the nest, very seldom four*, there seems a distinction, perhaps a difference between the forms.

Mr. Seebohm's artist has rendered the egg of 'Curvirostra' the more robust of the two.

THE WHITE-WINGED CROSSBILL.

(LOXIA LEUCOPTERA.)

Admitted to the B.O.U. List.

Admitted by Newton.

Admitted by Seebohm,

but only as *the American race* of a species common to both hemispheres. 'Bifasciata' the European, and

'Leucoptera' the American are he says "local races of a common species" of *Loxia*: he disposes of *the differences* upon which the specific distinction has been built, and admits that the European form is the larger, even as he considers 'Pityopsittacus' a large form of 'Curvirostra.'

THE SCARLET ROSE-FINCH.

(CARPODACUS ERYTHRINUS.)

Admitted to the B.O.U. List.

Admitted by Newton.

Admitted by Seebohm.

The B.O.U. List names it 'the Rosy Bullfinch.' Newton names it the Scarlet Grosbeak.

It is admitted upon two occurrences, both female.

My eggs are slightly *larger* than the eggs of the Bullfinch; Mr. Seebohm has accurately described the tint and markings but he says "they are *smaller* than the eggs of the Bullfinch;" *per contra* he says they *vary from* .9 by .63 inches and that the eggs of the Bullfinch *vary from* .85 by .6 inches.

THE CANARY.

(FRINGILLA CANARIA.)

Rejected from the B.O.U. List.

Admitted by Seebohm.

Mr. Seebohm remarks upon the reason for the rejection of the Canary from the Ibis List namely "specimens escaped from captivity are often met with in England" that it is not *the tame Canary* that is captured; that the

many examples which have been recorded, and are in the possession of competent judges, can not be distinguished

"From the Wild Canary of the Azores;" and have no marks of captivity about the feet, and tail; that they are caught in the clap nets on the Brighton coast; and are probably driven over by south-westerly gales from Madeira or the Azores.

THE GREENLAND REDPOLE.

(FRINGILLA HORNEMANNI.)

Admitted to the B.O.U. List.

Noticed by Newton.

Admitted by Seebohm,

as a variety of 'Linaria' the British form of Redpole; a bird which has only once been known to breed out of these islands. He says that the West European form 'rufescens,' and the Greenland form 'Hornemanni' are the extremes of 'Linaria.'

This fortunate bird shares the good luck of 'T. Atrigularis,' and the Buntings 'Rustica,' and 'Pusilla' in being admitted by the authorities, for Newton also, though not giving it place and picture, "can point to a single example obtained in England."

THE RUSTIC BUNTING.

(EMBERIZA RUSTICA.)

Admitted to the B O.U. List.

Admitted by Newton.

Admitted by Seebohm.

The B. O. U. List quotes two occurrences.

Professor Newton admitted it on "the first and

hitherto *only known* occurrence;" caught in 1867. In the same article he narrates how a bird belonging to Mr. Keulemans *escaped* in 1870: and the article concludes with a *very significant vignette* of a young person playing with a bird which has been let out of its cage.

Mr. Seebohm has however been able to record three occurrences; and has established its claim to be placed on the British List.

THE LITTLE BUNTING.

(*EMBERIZA PUSILLA.*)

Admitted to the B.O.U. List.

Admitted by Newton.

Admitted by Seebohm.

Upon *the one occurrence* when it was taken by a boy, who had caught it in a Brighton clap-net, to a Bird-stuffer on 2nd November, 1864, it had no marks of captivity: My experience is that a large number of the birds in my own aviaries, some having a flight of 35 feet, have no marks of captivity, but are in as perfect plumage as their wild brethren.

The triumph of this little bird's enrolment over every imaginable objection is the most complete of all; but while these Buntings are admitted upon their evidence; many persons whose 'first occurrences' have been rejected must have felt themselves somewhat hardly used.

THE BLACK-HEADED BUNTING.

(EMBERIZA MELANOCEPHALA.)

*Admitted to the B.O.U. List.**Admitted by Newton.**Admitted by Seebohm.*

This Bunting also is admitted upon one occurrence.

It was recorded by Mr. Gould in the Ibis 1869. "I have now to inform you of the occurrence of *Emberiza (Euspiza) melanocephala*, of which a very fine old female specimen, in perfect plumage, is now before me. It was brought to me by Mr. Robert Brasener, of 23, Lewes Road, Brighton, by whom it was shot, about the 3rd of November last, near Mr. Ballard's windmill, on Brighton race-course, while, as he stated, it was following a flock of Yellow Hammers."

The three Buntings, *Rustica*, *Pusilla*, *Melanocephala*, recorded by Newton, were all captured near Brighton only.

THE PURPLE MARTIN.

(PROGNE SUBIS.)

*Rejected from the B.O.U. List.**Admitted by Newton.**Admitted by Seebohm,*

to place and figure. It may be presumed that in the case of the *Hirundinidæ* the admission of an occurrence is a question of *authenticity* alone. As they are incapable of being preserved in confinement the *genuineness* would be above suspicion. The authenticity rests upon Yarrell's account that Mr. F. M'Coy wrote to him:

"That a female example of this species had been shot near Kingston, in the County of Dublin, which had been

sent for dissection to Dr. Scouler, a few hours afterwards, and when preserved was placed in the museum of the Royal Dublin Society."

This was in the year 1840, it is still in the museum.

THE WHITE-BELLIED SWALLOW.

(TACHYCINCTA BICOLOR.)

Rejected from the B.O.U. List.

Noticed by Newton.

Noticed by Seebohm.

The two last authorities express *no certain opinion* upon the occurrence which John Wolley recorded. I believe it was purchased by Cooke, a dealer in Derby, by him skinned and sold to Mr. Evans of Darley Abbey; by whom it was given to Wolley. Newton says:

"And though he with his usual caution was careful to remark that there was a 'possibility of mistake' about the matter there can be little doubt of the truth of the story told to him."

In America on account of their nesting in hollow trees, and holes in fences they are called 'Wood Swallows.' They range throughout North America. They construct a very loose soft warm nest of fine hay and leaves, and abundantly supplied with down, and soft feathers by which the eggs are often completely covered; the eggs are scarcely smaller than the eggs of the Martin, (*Urbica*) but a little thinner.

My clutch was taken by Mr. F. T. Pember, 29 May, 1882, at Granville, New York.

The reputed occurrences of the other two species *H. Rufula*, and *H. Cahirica* are rejected by our three authorities.

THE GREY-HEADED YELLOW WAGTAIL.

(MOTACILLA VIRIDIS.)

*Rejected from the B.O.U. List.**Noticed by Newton in a note on 'Flava.'**Omitted by Seebohm.*

The bird alluded to in the B.O.U. List was shot near Penzance; and is in Mr. Rodd's collection. The species seems undetermined, but Gould's opinion that it was Viridis-Cinereocapilla has been controverted.

My set of five eggs of M. Viridis taken in Lapland, June 16, 1883, in size are like 'Raii,' but colder grey in tint; and rounder in form. They are like pale Meadow Pipit's.

THE AMERICAN TITLARK.

(ANTHUS LUDOVICIANUS.)

*Rejected from the B.O.U. List.**Rejected by Newton.**Ranked by Seebohm,*

under 'Spinoletta' as a variety.

Newton however in his note to 'Obscurus,' speaking of the birds shot by Mc. Gillivray June 2, 1824, says that his more elaborate description appears certainly to be that of the American A. 'Ludovicianus' which seems to point to *genuine occurrences* of the bird.

Mr. Seebohm states that Ludovicianus is but the Nearctic form of Spinoletta (Campestris).

I have received eggs of Ludovicianus *exactly similar from two sources*; namely, two eggs taken by Herr Möschler's collector in Labrador; and three eggs collected for

Dr. Müller in Greenland June 18, 1882, all are *considerably smaller* than eggs of *Campestris*; and are as Davie describes them dark in tint; not the least like those of *Campestris*; if these eggs be true; 'Ludovicianus' and 'Campestris' can scarcely be conspecific.

THE RED-THROATED PIPIT.

(*ANTHUS CERVINUS*.)

Rejected from the B.O.U. List.

Not admitted by Newton.

Admitted by Seebohm to Place and Figure.

Professor Newton says of the 'Unst' specimen,

"A skin of the species in Mr. Bond's possession, bought at the sale of the late Mr. Troughton's collection, bears a ticket indicating that it was obtained in Unst, 4th May 1854; as it possibly may have been; but there is nothing to shew by whom it was procured; or that it is not a foreign example to which the label has been tied."

It was however labelled *where* procured, and *when*.

Mr. Seebohm says it has "scarcely any valid claim to be regarded as British."

Both authors coincide in the view *that there is little doubt that it visits Britain*; and its recognition is a matter of time; as it frequently occurs in Heligoland, and in most countries in Europe.

Professor Newton says the account of 'Cervinus' given by Dr. Bree, and Mr. Dresser, in their respective works, should remove all hesitation in future as to its *specific distinctness*.

But surely this is distinctly established so far as the Pipits of Britain are concerned by *the eggs alone*, which bear little similarity to those of the Meadow Pipits, less

still to any other of the genus unless it be those of the variable Tree Pipit. Are its eggs likewise variable?

My own clutch (Ost Finmarken, June 19, 1882) are most like to small rich forms of the Lapland Bunting.

Grey in his 'Birds of Scotland' says that it was seen at Dunbar in great numbers during the winter of 1846; *and that later at Dunbar he shot three specimens; he wrote about it to Mc. Gillivray but he received no answer.* These birds have not been preserved, and Professor Newton is inclined to assign them to 'Rupestris' it will depend on Grey's capability of distinguishing between the two forms.

CALANDRA LARK.

(ALAUDA CALANDRA.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

Mr. Seebohm is of opinion that the bird has with "*little doubt visited England*;" it has been captured in Heligoe land. The two instances have no reliable source.

My set of five eggs, three of them taken near Sarepta, June 20, 1882, are larger than those of the White-winged Lark from Russia, and have bolder markings than the Skylark's.

THE NEEDLE-TAILED SWIFT.

(CHÆTURA CAUDACUTA.)

Admitted to the B.O.U. List.

Noticed by Newton.

Admitted by Seebohm.

The occurrences seem distinctly and admittedly establish-

ed. The specimens having been examined by Yarrell, Newman, Doubleday, and Seebohm.

Newton says "*Mr. Yarrell did not think fit to mention it in his last edition doubtless regarding it as a straggler from Australia.*"

Seebohm says the unknown eggs are probably like those of the known Swift's, white.

Brewer speaking of the eggs of *Cypselus Acutus*, (Bonaparte) the American Spiny-tailed Swift, says they are pure white, and small for the size of the bird.

My clutch of this bird *C. Acutus* taken by Mr. S. H. Parker, at Lyttleton, North America, 8 June, 1879, are considerable smaller than the Swift's (*C. Apus*.) but larger than the Martin's. I have reason to believe that the eggs of the Spiny-tailed Swift (America) are passed off by some dealers for the Needle-tailed Swift's (Australia.) This bird being on our list.

THE ISABELLINE NIGHTJAR.

(*CAPRIMULGUS ÆGYPTIUS*.)

Occurrence unknown to the B.O.U. List. (1883).

Occurrence unknown to Newton. (1882).

Admitted by Seebohm.

The nature of its food precluding the possibility of it being an 'escaped' entitles it without hesitation to a place amongst the 'Birds on the British List.'

Mr. Whitaker writing to the Zoologist (1883) says.

"On the 23rd of June last my keeper shot a rabbit in Thieves Wood, near Mansfield; and at the report of the gun a Nightjar flew out at the edge of the wood; its light colour attracting his attention, he fired his other barrel at it and brought it down. Thinking it only a young bird he did

*not send it to me ; but kept it two days in his house and then threw it into the back yard ; where it lay until the afternoon of the same day, hens, pigeons, and children in the meantime doing their best to spoil its appearance. By good luck I went to see him, and hearing it was a light coloured bird, I went to look at it ; and I found what I thought was a pale variety of the Common Nightjar ; I need hardly say how vexed I was that it had not been brought to me ; but I cut off the wings, and tail, and I brought them home ; on comparing them with ' *Caprimulgus Europæus*' I saw a striking difference ; and sent back for the body, with which my bird stuffer has contrived to make a skin."*

Mr. Seebohm on comparing the bird with '*Ægyptiacus*' in his own collection identified it. He adds that the eggs are smaller, paler, and yellower, than those of '*Europæus*'.

Severtzow says the young keep company with the parents until the end of August.

It is admitted by H. Saunders in his preface to the 3rd vol. Yarrell's British Birds.

THE RED-NECKED NIGHTJAR.

(*CAPRIMULGUS RUFICOLLIS*.)

Admitted to the B.O.U List,

Noticed by Newton.

Admitted by Seebohm.

Newton says "it has a range so far to the Southward, that the only known appearance in England, especially when the season of the occurrence is considered, seems at present not to justify its being regarded as a British Bird."

The date was October 5, it could not be an 'escaped.'

Speaking of the authenticity of the occurrence Mr. Seebohm says "there seems no room for doubt."

My eggs were taken in Spain, 28 March, 1884. They are like weakly marked eggs of *Europæus*.

THE BLUE-TAILED BEE-EATER.

(*MEROPS PHILIPPINUS*.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

Professor Newton merely quotes the recorded occurrence in a note to the 'Bee-eater' (*Apiaster*) and says it is the sole European occurrence.

Mr. Seebohm says its district, the Malay Archipelago, is so distant that the occurrence was probably either of a bird which had escaped from an aviary, or the skin *may have been* changed at the Stuffers.

Is the Bee-eater a bird kept in aviaries?

The authority for the occurrence was Mr. Hancock, who says, in his 'Birds of Northumberland,' that it was shot near the Snook, Seaton Carew, in August, 1862.

Two eggs in my possession were taken at Barmak, India, 22 April, 1880, they are like those of 'Apiaster' but considerably smaller.

The remark of Professor Newton upon the 'Abysinian Roller' will apply here.

THE ABYSSINIAN ROLLER.

(CORACIAS LEUCOCEPHALUS.)

*Omitted from the B.O.U. List.**Noticed by Newton.**Rejected by Seebohm.*

Professor Newton records the occurrence and says

"It is a very unlikely bird to have escaped from confinement since Rollers are not often imported alive into this Country."

Mr. Seebohm says *"it is difficult to avoid the conclusion that the Paisley bird had escaped from confinement."*

In Dr. Bree's 'Birds of Europe' is the account of the occurrence.

It was shot near Glasgow about 1856, and taken in the flesh to Mr. Small (whose son was a bird stuffer in Edinburgh) he presented it to the Paisley Museum; and stated that the *female was also shot* at a place about 40 miles distant from Glasgow.

The fact that *no money was made out of the occurrence* seems to point to its being authentic.

And if the female were in company with the male it would suggest the impossibility of their being 'escapeds.'

THE GREAT BLACK WOODPECKER.

(PICUS MARTIUS.)

*Rejected from the B.O.U. List.**Rejected by Newton.**Rejected by Seebohm.*

The evidence for the occurrence of 'Martius' is *cumu-*

lative: The list being very long: between 30, and 40 have been recorded.

Mr. Yarrell gave it picture and place, from which it has been deposed by Professor Newton. Yarrell seems to have believed in some of the occurrences.

Mc. Gillivray's two specimens are thus vouched for, "two specimens in my collection, male and female, which I purchased of Dr. Madder to whom they were sent as shot near Nottingham: *Dr. Madder afterwards obtained a certificate from the person who procured them.*"

It is a bird about which the most ordinary observer could make no mistake as to its identity—in the case of Mc. Gillivray's birds every precaution to establish the occurrence seems to have been taken; and the birds having *occurred together* precludes the possibility of their being 'escaped.'

Many admitted birds are scarcely as well established in their title to enrolment.

THE MIDDLE SPOTTED WOODPECKER.

(PICUS MEDIUS.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

THE HAIRY WOODPECKER.

(PICUS VILLOSUS.)

Rejected from the B.O.U. List.

Noticed by Newton.

Noticed by Seebohm.

The B.O.U. List gives *no reason* for rejecting the occurrences.

Newton says that Latham's "*Halifax in Yorkshire*" may mean the "*Halifax in Nova Scotia*." Of the Whitby specimen he says nothing to *discredit* the occurrence.

Of the Halifax birds it must be noted that here again it was *a pair of birds* that Latham said he saw; which had been shot by Mr. Bolton—thus disposing of the idea that they could be escaped specimens.

We have it on the authority of Newman that they were *examined by Latham*. Where was Bolton resident?

The bird killed near Whitby in 1849, when examined had still *flesh adhering to the legs and wings*.

The fact that Woodpeckers brought from America in the middle of the last century in 1764, were let loose in England *according to 'an old Soldier'* as narrated by Walcot in 1789, does not seem to affect the question, which will concern the occurrence of *three species of American Woodpeckers*, birds which are very seldom found in captivity; this *has* however been suggested.

My eggs were taken May 9, and 16, 1885, at Granville, New York: they are indistinguishable from the eggs of 'P. Medius.'

THE DOWNY WOODPECKER.

(PICUS PUBESCENS.)

Rejected from the B.O.U. List.

Noticed by Newton.

Noticed by Seebohm.

Mr. O. Pickard, Cambridge, possessed the specimen killed at Bloxworth, in Dorsetshire, in December, 1836. It was considered to be a specimen of the Lesser Spotted Woodpecker; until *Mr. Bond* recognized in it '*Pubes-*

cens’; it was sent by him to Mr. Yarrell, but was not in time to be included in his work: on being shewn to Mr. Gould he expressed the very natural wish “to receive more from the same locality before determining on it.” (Zoologist, 1875.)

My clutch of eggs do not differ from eggs of ‘P. Minor.’

THREE-TOED WOODPECKER.

(PICOIDES TRIDACTYLUS.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

THE GOLDEN-WINGED WOODPECKER.

(COLAPTES AURATUS.)

Rejected from the B.O.U. List.

Rejected by Newton.

Rejected by Seebohm.

Professor Newton excludes it “on the principle already acted upon.”

Mr. Seebohm says “there can be little doubt that the bird was shot in this country but had most probably escaped from a cage.”

The account of the occurrence is given by Harting, “*M^r Marsh says, my brother, now member for Salisbury, saw the bird in the flesh before it was preserved; it was brought to him just after it was shot; it was preserved by Edwards, of Amesbury: and has never been out of my*

possession." *It was shot at Amesbury, in Wiltshire, in the Autumn of 1836.*

Here we have *five occurrences*, of three sorts of Woodpeckers, a bird like the Cuckoo very rarely kept long in confinement, by reason of its insectivorous diet ;

And, considering as I have already observed, that probably a small per centage of birds which escape are killed, and recorded, it seems impossible to conclude that the birds were escaped specimens.

How few Woodpeckers are kept in confinement ;

How few of these are permitted to escape ;

How few of those which escape are ever seen again ;

How many of those which are seen, and killed ; are killed by persons who take the trouble to record them ?

The consideration seems to reduce the probability to a vanishing point.

The eggs are of exceeding beauty, and polish ; My clutch were taken in Shelter Island, N.A., 27 May, 1883, from a nest composed of fine chips of wood, in a Locust tree, 8 feet from the ground ; the hen bird was seen to leave the nest. 9 eggs in a clutch. They measure 1.09 by .88 inches.

THE BLACK-BILLED CUCKOO.

(COCYZUS ERYTHROPHALMUS.)

Admitted to the B.O.U. List.

Rejected by Newton.

Undecided upon by Seebohm.

Professor Newton admits that it *has occurred once* in Britain, and once in Europe.

Mr. Seebohm states that "*it was shot by Dr. Rea at Killead, ten miles from Belfast, September 1871, it was*

erroneously recorded as the Yellow-billed Cuckoo ; but Lord Clermont subsequently identified it as the Black-billed species."

It occurred also near Lucca in Italy in 1858, and the Yellow-billed American Cuckoo was shot in Turin in 1883, October 30.

The Cuckoos are a tribe not kept in confinement except for a very short life.

From remarks which frequently occur in the delightful pages of the two naturalists which I have ventured to collate, I cannot but think that they would have admitted several Birds to *the British List*, were no claim therefore advanced to their being considered *British Birds*.

Mr. Seebohm says that small eggs of the Yellow-billed Cuckoo, are indistinguishable from large eggs of the Black-billed species ; but my clutches are quite distinct in tint. The eggs of 'Americanus' being pale grass green ; those of 'Erythrophthalmus' as blue as those of the Alpine Accentor ; yet without any polish.

THE PASSENGER PIGEON.

(ECTOPISTES MIGRATORIA.)

Admitted to the B.O.U. List.

*Admitted by Howard Saunders (Yarrell's
British Birds.)*

Rejected by Seebohm,

who says that there is no evidence that the bird has crossed the Atlantic.

Mr. H. Saunders however, enumerating the several occurrences, says of those which were recorded in 1867-69-76, that they may be escaped birds : (Andubon in 1830 brought many over to this country) but he considers that

the bird, shot in Scotland, in 1825, and the bird, caught in Ireland, in 1856, from the fact that, *though birds of most powerful flight, they were quite exhausted by fatigue; and the crop of the Scotch specimen quite empty; and the stomach having no trace of artificial food;* that Thompson's (Birds of Ireland) conjecture is admissible "*the account of this individual leads me to believe that it may have crossed the Atlantic.*"

The eggs which are nearer in size to the Turtle dove, than to the Rock dove, measure according to Saunders 1.5 by 1.1 inches; according to Davie 1.45 by 1.05 inches; he confirms Saunders that it lays two eggs.

Two eggs which I have received from Minnesota March, 1884 measure 1.4 by 1 and 1.33 by .98 inches.

PALLAS' SAND GROUSE.

(SYRRHAPTES PARADOXUS.)

The eggs of different descriptions of Sand Grouse bear a strong family likeness; but some are larger, some darker, and rounder than other; the eggs of the bird upon the British List are yellowy cream colour; blotched with pale red brown; and having like the 'Hemipode' underlying spots of purplish grey. A character I believe peculiar to these species among the 'Phasianidæ.' As these birds lay very few eggs to a clutch, there is probably a longer time between the layings; giving time for two impressions of markings, for which there would be less time where the bird, laying many eggs, lays every day; as do many of the game birds.

Eggs which I have received, through Mr. Marsden, taken by Herr Tancre's Collector in the Altai Mountains measure 1.7 by 1.2 inches.

ROCK PTARMIGAN.

(LAGOPUS RUPESTRIS.)

*Rejected from the B.O.U. List.**Rejected by H. Saunders.**Rejected by Seebohm.*

Mr. Saunders points out that the Sutherlandshire bird of 1834, has been considered the female of *L. Mutus*, in summer dress.

He does not refer to the occurrence of 1825, in Perthshire, of a specimen, of which there is an account in the notes of Mr. J. Sabine; and which, having been placed in the Stanley collection, as having been killed near Blair; and considered to be a hybrid between the Red Grouse, and Ptarmigan; was afterwards pronounced to be the Rock Ptarmigan.

Eggs taken in Labrador, June 8th, 1883, in my possession, are, in my opinion, rather more boldly blotched than those of the Red Grouse, and Ptarmigan; the ground colour warmer in tint than eggs of the latter, a clutch is from four to eight.

Davie gives the measurement, 1.63 by 1.18 inches.

THE BARBARY PARTRIDGE.

(CACCABIS PETROSA.)

*Admitted to the B. O. U. List.**Rejected by H. Saunders.**Rejected by Seebohm,*

as being non-migratory; or artificially introduced.

There have been six occurrences; its range is North West Africa, Sardinia, Gibraltar. Eggs, well known.

THE AMERICAN QUAIL.

(ORTYX VIRGINIANA.)

*Rejected from the B.O.U. List.**Rejected by H. Saunders.**Rejected by Seebohm.*

The bird having been introduced, and bred, has yet not held its ground.

In my Aviary I did not succeed in getting eggs from the birds, until I had inserted a flower-pot over the hollowed-out nest made in the sand, and lined with a few feathers. The eggs are white, as are also those of the Florida, and the Texan Quails, plain eggs are produced also by the Mountain Quail, 'Picta,' of a warm cream tint; and the Oregon Ruffed-Grouse, of a dark cream colour. The clutch of Virginiana reaches 25 eggs.

In confinement I have known the Californian Quail lay 300 eggs in a season; and survive it. I have reared several broods under small bantams very successfully; and a more exquisite sight I never beheld than to see eighteen of them about the size of walnuts gathering round a large strawberry. One year I confined the Californian pair in an out-house; having set as many clutches as I could get bantams to cover; and the cock made a nest in the corner among some straw, in which the hen having furnished it with a few eggs, he immediately began to sit, but the hen continued to lay so perseveringly that the eggs overflowed the nest on all sides, and he had to resign.

THE GALLINULES.

(PORPHYRIO, CÆRULEUS; SMARAGDONOTUS; AND
MARTINICUS.)

Rejected from the B.O.U. List.

Rejected by H. Saunders.

Rejected by Seebohm.

Of the Gallinules there are *seven instances of occurrence* since 1863: and *others* have been recorded.

Mr. Saunders says "many of the individuals captured can clearly be proved to have escaped."

He does not tell us whether those thus recaptured had been *pinioned* or not. I have seen no record of the captured birds having been found to be pinioned birds. When we consider that our Corn Crane has found its way to Greenland, as well as to the East Coast of North America, it is more easy to believe that 'Cæruleus' has reached us from Spain, 'Smaragdonotus' from Africa, and that 'Martinicus' has wandered from America to the south west coast of Ireland, than that so many of these valuable birds should be suffered to escape from their closed aviaries, as it may be presumed they are never turned into open enclosures *unpinioned*.

My eggs of 'Martinicus' are small and very refined editions of the Moorhen's eggs.

THE DEMOISELLE CRANE.

(GRUS VIRGO.)

Rejected from the B.O.U. List.

Rejected by H. Saunders.

Admitted by Seebohm,

who says that a *pair* were seen in Orkney, of which one was shot.

Mr. Seebohm seems to see here the force of *the two birds being seen together*, that it precludes the probability of the 'escaped' theory.

Mr. Saunders who records the pair does not touch this point; but says of the Somersetshire occurrence, which Mr. Seebohm also rejects, that it had probably escaped from confinement.

'Virgo' was shot in Nerika, in June 1857; and is in the Museum at Orebro. Another was shot at Böö, near Strömstad, in May 1874; it has occurred in Upper Silesia; and in Heligoland according to Naumann.

THE SOUDAN CRANE.

(GRUS PAVONIA.)

Rejected by the three Authorities,

upon *one occurrence*, which in all probability *was* an escaped bird.

MACQUEEN'S BUSTARD.

(OTIS MACQUEENI.)

Admitted by the three Authorities,

upon *one occurrence*.

Its range is Central Asia, but it has occurred several times in Central Europe.

Mr. Seebohm in describing his egg, says "*It is a very distinct type from either of the other British Bustards, and more closely approaches that of the Plovers.*"

My egg, however, taken by Herr Tancre's collector, in the Altai Mountains, is very like a small specimen of

the Great Bustard, except that the few spots are darker ; it is oval, and glossy like 'Otis,' not dull and pyriform like 'Charadrius.'

The underlying markings are by far the more numerous, and fall *longitudinally*.

THE PACIFIC GOLDEN PLOVER.

(CHARADRIUS DOMINICUS FULVUS.)

Admitted to the B.O.U. List.

Rejected by H. Saunders

Admitted by Seebohm.

Mr. Saunders considers that the bird, stated to have been brought with other Plovers from Norfolk to Leadenhall Market, in December, 1874, and there observed by Mr. Bidwell, and identified by Mr. Dresser, *may not improbably* have occurred in that County, but the evidence is not sufficient "to justify the admission of this species as a British Bird."

Eggs of 'Fulvus' in my possession are smaller than those of 'Pluvialis'; but larger than those of 'V. Cristatus'; the ground colour like the latter, but paler; the spots and blotches smaller than those of 'Pluvialis'; they were taken on 14th June, 1883, at Alaska, by Mr. S. D. Rice, who shot the hen bird to identify the eggs. Mr. Seebohm says that several of the Asiatic birds cross over to Alaska. "*Siberia in Europe.*"

The eggs are *so much smaller* than those of the American Golden Plover that they seem to *contradict the idea that the birds are conspecific* ; which Coues once held to be the case, but he seems to have changed his view, and considers Fulvus the *smaller species*.

THE AMERICAN GOLDEN PLOVER.

(CHARADRIUS DOMINICUS.)

*Omitted from the B.O.U. List.**Rejected by H. Saunders.**Notified by Seebohm,*

who considers it *conspecific* with '*Fulvus*.'

This bird, like the last, has occurred once in Leadenhall Market; it was examined in the flesh by Mr. Seebohm, who says "it is impossible to say where it was killed."

It has occurred in Heligoland.

Dr. Coues, in his '*Birds of North West America*,' says that '*Virginicus*' is a *variety* of '*Fulvus*,' distinct from '*Pluvialis*,' but in a note he says he is able "to announce that the true *Fulvus* is an inhabitant of North America, a bird identical with the Asiatic bird, and smaller than *Virginicus*."

My eggs were taken at Fort Resolution, Canada, by Mr. N. T. Wendall, who shot the bird at the nest to identify the eggs; they are, as I have said, larger, and brighter, and glossier than those of '*Fulvus*'; and in this resemble the eggs of '*Pluvialis*.'

The eggs forbid the idea that '*Virginicus*' and '*Fulvus*' are conspecific. Two eggs which I have, taken by Mr. G. W. Nelson, at St. Michael's, Alaska, on June 20th, 1880, are however as small as '*Fulvus*'; but very bright and glossy; these are quite unlike any eggs of '*Pluvialis*' I have ever seen.

THE KILLDEER PLOVER.

(OXYECHUS VOCIFERUS.)

*Admitted to the B.O.U. List.**Noticed by H. Saunders.**Noticed by Seebohm.*

The hesitancy to admit the bird by the two authorities was due to the uncertainty concerning the authenticity of the Hampshire occurrence. It has, however, been overcome by the indisputable occurrence in the Scilly Islands; as referred to by Mr. Seebohm in his addenda: and Mr. Saunders in his preface of Vol. 3. of Yarrell's British Birds.

The Rev. R. W. J. Smart, Vicar of Bishopscourt, was informed by Mr. F. Jenkinson of some of the circumstances attending the occurrence: the Killdeer Plover (C. Vociferus) was seen for several days about the Long Pool and shot by him (Mr. Jenkinson) 14th January, 1885; "*it was a lovely bird, and easily identified: a female, fat, and healthy; the chesnut tail coverts were very conspicuous as it flew.*"

The eggs are very distinct. My clutch was taken by Mr. W. B. Moody, at Marysville, North America, on 25th May, 1883.

THE SPOTTED SANDPIPER.

(TRINGOIDES MACULARIUS.)

*Rejected from the B.O.U. List.**Admitted by H. Saunders.**Admitted by Seebohm.*

Mr. H. Saunders admits it on *four occurrences* which

entitle it "to retain its place on the list, two near Eastbourne, 1866; two near Aberdeen, 1867.

Mr. Seebohm quotes *seven* "*unshaken occurrences.*"

With reference to the occurrences of the two birds shot by Edwin Lord, of Warrington, on the Mersey, in May, 1863, alluded to by Mr. Seebohm; and those seen (fortunately not shot!) in 1866 by Mr. Lord; Mr. C. S. Gregson, who possesses one of the birds, wrote June 12, 1884, to Mr. Mitchell, author of the 'Birds of Lancashire,' stating that he had seen *four specimens of this American bird in the process of being skinned by Mr. Lord.*

Mr. Seebohm says the eggs *closely resemble* those of the Killdeer Plover in some points.

My four eggs taken by Mr. Pember at Granville, New York, 29th May, 1882, are more polished, creamier in ground tint, ruddier in spots; than my eggs of the Killdeer Plover, which are *totally without gloss*, and the markings blackish-brown.

THE SOLITARY SANDPIPER.

(*RHYACOPHILUS SOLITARIUS.*)

Rejected from the B.O.U. List.

Noticed by H. Saunders.

Admitted by Seebohm.

The List, *published in 1883*, takes no notice of *the occurrence in 1882, September 21*, in the Scilly Islands.

Mr. Saunders, who hesitated to admit the Scilly bird, admits (in the preface of vol. iii, Yarrell's British Birds) the occurrence, which was recorded in the Zoologist for 1885, of 'Solitarius,' shot near Marazion, Cornwall.

The Rev. R. W. J. Smart writes to me concerning the Scilly specimen, now in possession of Mr. Dorian Smith, of Tresco.

“‘*Totanus Chloropygius*’ was shot on 19th September, 1882, by the keeper at Fresco Abbey, on S. Mary’s ; his master with friends were shooting snipe ; and he observed the note, and flight of the bird ; and obtained leave to go back after it with a gun ; and secured it : it was sent for preservation to Vingoe, the naturalist, at Penzance : and was identified as ‘*Solitarius*.’ In my correspondence with Jenkinson, the following passage with reference to it occurs under date 3rd January, 1883, ‘Professor Newton is much interested about ‘*Totanus Chloropygius*’ (for this is its proper name), the other specimen was found in a collection with no details, as to when, or where it occurred. It seems Snipe-like in its flight ; uttering a ‘tweet’ as it rises ; and is Jack-snipe like in its sluggishness, and propensity to return soon to the same place. It is said to fly very dexterously among woods ; it is as well that *Solitarius* is not its proper name as it appears to be highly gregarious.’ ”

Nevertheless, as it is an American Bird, we must abide by the decision of what is in some sort an authoritative list of American birds ; and it is named in the Bulletin, published by the United States, National Museum, in 1881, “*Rhyacophilus Solitarius*.”

Mr. Seeböhm says the eggs are unknown.

Professor Davie in his Check list says of them “light drab ; marked with spots of brown, some quite dark, nowhere confluent ; two to four ; 1.40 by 1.10, nests in a hollow on the ground.”

THE YELLOW LEGGED SANDPIPER.

(TOTANUS FLAVIPES.)

*Rejected from the B.O.U. List.**Admitted by H. Saunders.**Admitted by Seebohm.*

The *two first occurrences* of 'Flavipes' are not considered quite authenticated. However, both Mr. Saunders, and Mr. Seebohm have no hesitation about admitting *the adult male* recorded in the Zoologist for 1871, as *shot by Mr. E. Vingoe, on 12th September, 1871, on the margin of a pool in a salt marsh, near Marazion, about two miles from Penzance.*"

This Mr. Saunders calls the "second genuine specimen" of the bird.

The admission to the list, on a single occurrence of a bird on the word of a "Dealer" has not always been judged admissible ; as I have previously said, we cannot reject the word of persons of known respectability, in the case of specimens for private collections, this, however, is more serious.

The eggs, according to Davie, are creamy, or clay colour; heavily blotched with chocolate, and umber; shell markings numerous; 1.40 by 1.10 inches.

 THE BAR-TAILED GODWIT.

(TOTANUS RUFUS.)

The eggs of Rufus are some of them probably indistinguishable from those of 'Melanurus.' *The breeding station* of 'Rufus' is more *northern* than that which 'Melanurus' visits; whose northernmost range is latitude 55°, to 60°.

Wheelwright in his 'Sweden' says the eggs are *smaller* and paler than of 'Rufus.'

Ray's average of *Melanurus* is 54.3 by 37.0. Ray's measure of eggs of 'Rufus' (Schlüter's eggs from Muonio-Lapland) is 50.5 by 38.0, and 50.0 by 36.0.

An egg which I have, taken at Archangel, 23rd June, 1880, is like a *small* and handsome egg of '*Melanurus*'; it measures 2.6 by 1.46 inches.

Another one, from Herr Möschler, taken in North Russia, 18th July, 1883, is *smaller still*: and singularly pyriform; it measures 1.94 by 1.44 inches: and .27 in diameter at section .11 inch from apex; as against .42 in the other egg at .11 inch from apex.

THE RED-BREASTED SNIPE.

(*MACRORAMPHUS GRISEUS*.)

Mr. H. Saunders gives the dimensions of the egg 1.62 by 1.12 inches.

Mr. Seebohm 1.75 by 1.20.

Eggs in my possession measure 1.74 by 1.27 inches. They were taken on Resolution Island, Hudson Bay, 8th July, 1884, by Mr. N. S. Sargeant, who *shot the hen bird* for identification.

THE KNOT.

(*TRINGA CANUTUS*.)

It is denied that authenticated eggs of the Knot exist.

There is *an egg* (or was, August, 1884) in the Edinburgh Museum, labeled "T. Canutus authentic"; it is in the same cabinet with some eggs that belonged to Wheelwright.

In Mr. Bidwell's collection there is *an egg* which, differing from a large series of Snipe's eggs, is exactly like the drawing which I made from the Edinburgh egg.

I have *three eggs* which were purchased at the sale of Wheelwright's eggs; two of which are almost identical with Mr. Bidwell's egg; they are the eggs described in a letter, written to the *Daily Telegraph*, in 1875, in opposition to the idea that the Knot's eggs were unknown, which letter quotes a marginal note in Wheelwright's copy of Morris's Birds Eggs, upon his illustration of a presumed Knot's Egg, "*Not in the least like the eggs of the Knot that I have had from Greenland and Spitzbergen, nor does this figure at all resemble that in Blaseus, which much resembles my eggs, in colouring they are not unlike the Snipe's.*" In his 'Sweden' he states that his *Knot's eggs* were from Greenland.

These eggs are shorter than the Snipes; and of a dun olive; the ground and markings not being so distinct as the eggs of the Snipe. An average egg is 1.27 by 1.12 inches: Davie gives the measurement 1.32 by .98.

Mr. Murdoch, of the Smithsonian Institute, Washington, writes to me in 1885:

"*I have found full sized yelks in the birds at Point Barrow, Alaska.*" And later writes:

"*Lieutenant Greely shot a female with an egg ready for extrusion, but it was lost in the disastrous retreat from Franklin Bay.*" I have seen Greely's description of the egg, but, if taken from the bird after death, it might have been a curiosity; but nothing to determine the true appearance of the egg.

Dr. Saxby says that Thomas Edmonstone, in his MS. Notes to his 'Catalogue of Birds of Shetland,' states *that he has little doubt that the Knot breeds in the Northern districts*; he has seen, and shot them at the beginning

and end of June : and later in the year seen "*young ones so weak as rather to have fluttered than flown.*"

SCHINZ'S SANDPIPER.

(TRINGA SCHINZI.)

A small European form of the Dunlin; *which has not occurred in Britain*; but the name has not yet been struck out from some private lists. It enables some persons to *plant upon the unwary* the eggs of this form of Dunlin for Bonaparte's Sandpiper (Fuscicollis) unfortunately named 'Schinzi' in the earlier editions of Yarrell.

BONAPARTE'S SANDPIPER.

(TRINGA FUSCICOLLIS.)

The egg, in the possession of Mr. Seebohm, which has been copied for his book, is not, *as the text shows*, typical, perhaps a beautiful variety, larger, and ruddier than the egg of the Broad-billed Sandpiper, but having a similar richly freckled appearance. The description, *in his text*, of Macfarlane's eggs, describes the Dunlin type.

My own clutch of four eggs approach the Dunlin; two verge slightly towards Mr. Seebohm's illustration. They were found by Mr. M. T. Smith, *who shot the bird for identification* in a nest on the side of the Great Salt Lake, B.A., on June 22nd, 1884.

THE LITTLE STINT.

(TRINGA MINUTA.)

I have received eggs of this bird from Herr Schlüter, and

Mr. Seebohm's description of the egg "*in every respect miniature Dunlin's*" applies to them. Herr Schlüter writes:

"*Eggs of this species I have obtained for the first time; I have only received five eggs in all; coming from the neighbourhood of Ulkograna, in Finland; my collector has observed the birds for a long time, until at last he succeeded in finding three nests. One of the sets was already hatched; so that he had to leave it; there is not the least doubt these eggs belong to the species 'Tringa Minuta;'* they are a little bigger than eggs of '*Tringa Temmincki,*' a yellowish ground colour and large spots on the flat end, September 26th, 1885."

There is no resemblance whatever in them to those varieties of '*Temmincki*' which are made *to do duty* for '*Minuta,*' in so many cabinets.

THE AMERICAN STINT.

(TRINGA MINUTILLA.)

Mr. Seebohm says that "*it can scarcely be regarded as more than a local race of that bird (Minuta),*" and that if the extremes of one race should be mixed with extremes of the other, they would be indistinguishable.

Davie says of the eggs "creamy or buff colour; spotted, and blotched irregularly, and thickly with different shades of brown;" he gives Seebohm's smallest measurement ".95 by .75." Mr. Seebohm's description and drawing are very like a small form of the eggs of '*Ereunetes Pusillus*'

THE BUFF-BREASTED SANDPIPER.

(TRYNGITES RUFESCENS.)

Davie gives the description of its nidification "clay colour of various shades; sharply spotted with rich Umber brown, pointedly pyriform, four 1.45 by 1.05, variable; nests on the ground in a slight depression.

My own experience has been that on very many eggs the blotches are better matched by *Madder brown*, than any of those tints by which those markings are always described.

The egg in the Edinburgh Museum, presented by the Smithsonian Institute, is like a large Dunlin's egg.

WILSON'S SNIPE.

(GALLINAGO MEDIA WILSONI.)

*Rejected from the B.O.U List.**Noticed by H. Saunders.**Admitted by Seebohm,*

who considers it subspecific to the Common Snipe.

One bird of this species was shot at Taplow Court, Bucks, on 1st August, 1863, it was forwarded *at once to Mr. Gould for identification in the flesh, and examined by Mr. Harting.*

This could not have been an 'escaped' bird.

Two eggs which I have were taken by Mr. J. F. Hill, at Hebron, New York, on May 16, 1882, *the bird was seen at the nest*; which was composed of dry grasses, in a tussock on the marsh; it contained only two eggs; they are unlike any Snipe's eggs I have seen; clear clay-coloured ground; markings slight; very pyramidal; size of Snipe's.

THE BRIDLED TERN. (SCOPOLI.)

(STERNA ANÆSTHETA.)

*Admitted to the B.O.U. List.**Noticed by H. Saunders.**Noticed by Seebohm.*

Mr. Saunders says of the single occurrence “ *The smaller Sooty Tern (Sterna Anæsthesia, Scopoli), is believed by the Editor to have straggled to one of the lightships at the mouth of the Thames, in September, 1875. Both Mr. Bidwell, in whose collection the specimen now is, and the Editor interviewed the local bird-stuffer who stated that he mounted it ‘from the flesh’ and they were convinced of the truth of his assertion, the evidence is however not sufficiently perfect to warrant the introduction of this species as a British bird.*

Surely the evidence could scarcely be more complete ; it could not have been an escaped bird.

Eggs in my possession taken at Washerwoman Key, Bahamas, 5th June, 1884, are fac-similes of eggs of ‘*Fuliginosa*,’ except in size: they are smaller.

THE NODDY TERN.

(ANOUS STOLIDUS.)

*Admitted to the B.O.U. List.**Admitted by H. Saunders.**Noticed by Seebohm,*

who considers the evidence for its admission ‘insufficient.’

Mr. Saunders says the eggs are more calcareous than, and indistinguishable from eggs of the Sooty Tern.

I cannot detect this difference of surface in eggs in my possession, taken by Mr. W. G. Tate, at Tampa, Florida, 9th May, 1882, while the distinction in appearance is accurately rendered in Mr. Seebohm's fine work.

THE LITTLE GULL.

(*LARUS MINUTUS*.)

Mr. H. Saunders says the eggs of 'Minutus' are pear shaped.

Mr. Seebohm says "*absolutely indistinguishable from the Common Tern.*"

The specimens which I have, and which were taken in Russia, 10th June, 1864, bear *no similarity to eggs of 'Sterna,'* but, except that they are of even deeper tone, bear a strong similiarity to small dark specimens of Sabine's Gull. They are also true Gull-shaped, not pyriform, like the 'Scolopacidæ.'

SABINE'S GULL.

(*XEMA SABINI*.)

The first egg that I saw, was one in the Edinburgh Museum (a present from the Smithsonian Institute), in August, 1884. It was a dull specimen. Seven eggs in my possession vary little, but some are slightly longer than others; some have a ground tint of greener olive; and some of an almost ochre-olive: the blotching is of the usual indistinct type. They were taken by Mr. E. W. Nelson, at S. Michael's, Alaska, on June 9, and 13, 1880. An average egg is 1.75 by 1.26 inches, one zonally marked reaches 1.89 by 1.29 inches.

ROSS'S GULL.

(LARUS ROSSI.)

*Rejected from the B.O.U. List.**Noticed by H. Saunders.**Noticed by Seebohm.*

The bird is given place by both these gentlemen in their respective works; they point out however *irreconcilable accounts* of the Yorkshire bird, the sole occurrence.

Mr. Seebohm says "*these conflicting statements probably both originated with Graham, the York bird-stuffer, through whose hands the bird passed, and who may have purchased the skin from a Hull whaler,*" and "*its breeding grounds are still unknown ; and its nest and eggs still remain a tempting prize in the mysterious icy north.*"

This year, 1885, a record has appeared in the 'Field.'

On the 15th June last, a very rare bird was shot at Christianshaab, Greenland, by Mr. Paul Moeller, namely, Ross's Gull : and its eggs, so far as I am aware previously unknown, were also secured at the same time."
Georg Brochuer (Arstedsoei, Copenhagen).

BONAPARTE'S GULL.

(LARUS PHILADELPHIÆ.)

*Rejected from the B.O.U. List.**Admitted by H. Saunders.**Admitted by Seebohm.*

Mr. H. E. Dresser is sceptical as to its occurrence, several specimens sent to him as Philadelphæ, turned out to be small 'Ridibundus.'

Mr. Seebohm however enumerates seven *established instances* of its occurrence.

Mr. H. Saunders also mentions these occurrences; and concerning one of them has the following:

As regards the occurrence of Bonaparte's Gull in Scotland there is not the smallest doubt.

About the end of April, 1850. Sir G. H. Leith-Buchanan shot a fine adult specimen; a portrait of which was sent to the author (Yarrell) and clearly identified; but as some scepticism had been recently expressed, in a standard work on Ornithology, Sir George sent the bird to the Editor, who exhibited it before the Meeting of the Zoological Society, on the 4th March, 1884. (The B.O.U. List was published 1883.)

The egg in the Edinburgh Museum, a gift of the Smithsonian Institute, is rather larger than the egg of the Common Tern; oval; clear greenish ground colour; umber blotches; small, even, underlying purplish marks: in size nearer to Mr. Saunders' dimensions than to those of Mr. Seebohm.

THE LAUGHING GULL.

(*LARUS ATRICILLA.*)

Rejected from the B.O.U. List.

Rejected by H. Saunders.

Rejected by Seebohm,

who points out that the specimen stated in the B.O.U. List to be in the British Museum is 'Ridibundus.'

Mr. Seebohm says the egg which he depicts, is indistinguishable from that of 'Ridibundus.'

My eggs, however, taken 3rd June, 1884, in Florida, are larger.

THE ADRIATIC GULL.

(LARUS MELANOCEPHALUS.)

*Rejected from the B.O.U. List.**Noticed by H. Saunders.**Rejected by Seebohm.*

The evidence seems clear that the bird, shot in January, 1866, was sold by Mr. Whitley, Curator of the Woolwich Museum, to Mr. G. Gray, in March of the same year; and placed in the British Museum, *as a hybrid between the Common Gull, and the Kittiwake.*

It has been suggested that the label has been changed, but the error concerning the hybrid *points to a remarkable bird* having been transferred from Woolwich to London; and the question occurs, *where is that bird, if the labeled bird be not it.* The bird also was a stranger to Mr. Whitley, on his receipt of it from the shooter. Its range by no means forbids the probability of the occurrence.

My clutch of eggs of this species bear no similarity to any Gull's eggs. There is no tint of Green, and they have a very mealy marbled appearance, something like that in the egg of the Goatsucker.

THE GREAT BLACK-HEADED GULL.

(LARUS ICTHYAETOS.)

*Admitted to the B.O.U. List.**Admitted by H. Saunders.**Noticed by Seebohm,*

who, speaking of the authentic occurrence of the genuine bird, says "*It seems probable*"; and depicts the egg.

With reference to the well-known instance of the Exeter bird, Mr. Saunders says :

"It has been examined by many Ornithologists including the Editor (of Yarrell's British Birds, vol iii, 4th edition), and although its appearance on our shores is remarkable; the bird cannot be suspected of having escaped from confinement, for no instance is known of its having been kept in captivity."

The eggs are handsome, striking in appearance; and differ, so far as I have seen, from the eggs of the other large Gulls in the more decided contrast between the ground colour, and the markings.

My clutch from Sarepta strongly resemble Mr. Seebohm's illustration.

THE IVORY GULL.

(*LARUS EBURNEUS.*)

There are two eggs in the *Stockholm Museum*; one in the *Dublin Museum*; and one in *Mr. Benson's collection at Copenhagen*, there was also one in the *collection of the late Mr. Ellingsen, Copenhagen*, and this egg is now in my possession: it is of remarkable appearance, its peculiarity of form, as also its dimensions, corresponds exactly with the drawing in *Mr. Seebohm's Oology*: but that egg is of *the pale type*, my egg is a *deep rich brown yellow*, very boldly blotched: *the pale and dark types* of the Gull's eggs are well depicted in the work just mentioned. I do not see the *similarity to the Kittiwake's*, either in this egg or in *Mr. Seebohm's drawing*, which this gentleman points to.

THE POMARINE SKUA.

(STERCORARIUS POMARINUS.)

An egg which I received amongst others which belonged to Wheelwright, labeled 'Pomarine Skua,' corresponds accurately with his description in his 'Sweden' that they are like 'Crepidatus' but more pointed, "*one I have, which I believe to be authentic, from Lapland, is more pointed than any I ever saw.*"

The egg of which I speak is a deep rich olive, darker and larger than any eggs of Richardson's Skua, long and pointed, it much resembles the drawing in Mr. Seebohm's work: I sent it to Mr. Seebohm last year for his opinion; he considered it 'Richardson's Skua.' Its dimensions are 2.48 by 1.66 inches. Saunders gives 2.45 by 1.7 inch. Seebohm 2.4 by 1.7 inch to 2.25 by 1.6 inch.

I have received eggs of similar dimensions taken by Mr. G. S. Kennedy, on 21st June, 1884, on Round Island, Alaska; the nest being on the ground just above high water mark, and by Mr. R. S. White, taken on 16th June, 1882, in Iceland.

The egg in the Edinburgh Museum, presented by the Smithsonian Institute, bears little similarity to those noticed above, it is shaped more like the egg of *Larus*; the ground is not quite so dark an olive as *Lestris*; and the markings more distinct; and hieroglyphical. It tallies exactly with two eggs in my collection, taken by Mr. N. G. Sargent from a nest which contained but two; composed of a few reeds, and grasses on the ground; on 30th June, 1884, on Revolution Island, Hudson's Bay; the incubation was not begun; and he shot the bird from the nest for identification. They measure 2.37 by 1.76 inches; ovate.

THE YELLOW-BILLED DIVER.

(COLYMBUS ADAMSI.)

Rejected from the B.O.U. List,

(which speaks of it as a "species," but adds that Dr. Coues regards it a variety of *C. Glacialis*). The List regards the occurrence to have been, *doubtfully*, that of 'Adamsi.'

With reference to the bird shot at Pakefield, Sussex in 1852, Mr. J. H. Gurney wrote to Mr. Sclater that it was shot from the beach at that place; and taken to Mr. Scales, a gentleman at Pakefield, who sent it to Thirtle the bird-stuffer; and ultimately gave it to Mr. Gurney.

It is not admitted to place, and portrait by Saunders who seems to share the doubt cast on the occurrence by the B.O.U.; and points out that the immature 'Glacialis' has frequently the pale horn coloured bill.

Admitted by Seebohm,

who, after recording the Pakefield bird, says that "*a second British example*" was, on the authority of Mr. Hancock, shot on the coast of Northumberland; and is in the New-castle Museum.

(Since writing the above, *Mr. H. Saunders has admitted* 'Adamsi' in his preface to Vol. 3, Yarrell's British, Birds.)

BRUNNICH'S GUILLEMOT.

(URIA BRUNICHII.)

Admitted to be a rare straggler to the Northern Isles and Coasts of Scotland *by the B.O. Union.*

Admitted by Saunders,

who holds the evidence for its admission to be "some-
what slight."

Admitted by Seebohm,

who says "*It has been most frequently observed in the
Orkneys, and extreme North of Scotland, but there can be little
doubt that it is often overlooked, and confused with its smaller
billed ally.*"

My eggs do not differ from those of 'Troile,' they
were taken by Dunn, in Iceland ; he carefully "*watching
the birds go to their nest.*"

THE CAPPED PETREL.

(ÆSTRELATA HÆSITATA.)

*Is admitted on one occurrence, about which there can
be no dispute, by the B.O.U. List.*

Admitted by H. Saunders,

yet its habitat is America.

Rejected by Seebohm,

so far as only giving it a few lines under the article on
'Wilson's Petrel' goes.

THE CAPE PETREL.

(DAPTION CAPENSE.)

Rejected from the B.O.U. List.

Rejected by H. Saunders.

Noticed under the article 'Capped Petrel.'

Rejected by Seebohm.

Noticed under article 'Wilson's' Petrel.

BULWER'S PETREL.

(BULWERIA COLOMBINA.)

*Admitted to the B.O.U. List on a single occurrence.**Admitted by H. Saunders on one "authenticated example."**Rejected by Seebohm, as having occurred but once in these Islands.*

THE SOOTY SHEARWATER.

(PUFFINUS GRISEUS.)

(CINEREUS MACG.)

Certain information as to the dimension of the egg of this bird seems wanting. Seebohm says the bird is *intermediate in size* between the Great Shearwater and the Manx Shearwater.

The average egg of the Manx Shearwater is 2.40 by 1.65 inches.

The egg of the Great Shearwater, which I have received from Mr. Bidwell, is 2.90 by 1.90 inches. The egg of 'Nectris Cinereus,' which I have received from Dr. Müller of Frankfort, is 2.75 by 1.81 inches *intermediate in size* between the Great and the Manx Shearwater's eggs.

Saunders says the bird is smaller than 'P. Kuhli,' whose egg also is intermediate between the Great and Manx Shearwater's eggs, namely 2.60 by 1.70.

If *these* conclusions are correct the egg of 'Griseus' should *range in size between* the egg of 'Kuhli' and the egg of 'Anglorum' i.e. *between* 2.60 by 1.70 and 2.40 by 1.65 inches which would *by no means be intermediate in size* between the eggs of the Great and Manx Shearwater's, as the birds are described to be by Seebohm; and which condition is fulfilled in the egg of 'Nectris Cinereus' 2.75 by 1.81, inches mentioned above.

There seems still certain information wanting as to which of the Shearwaters visit our shores.

Mr. Saunders in his article on the Great Shearwater seems to give the *Sooty* Shearwater the name of *Dusky* Shearwater.

"In former editions of this work (Yarrell's *British Birds*), it was confounded with its somewhat smaller congener the Dusky Shearwater *Puffinus Griseus*" and again "the Dusky Shearwater was supposed to be the immature stage of *P. Major*." Still in his article on '*Puffinus Griseus*' he gives the proper appellation '*Sooty Shearwater*.'

THE DUSKY SHEARWATER.

(*PUFFINUS OBSCURUS*.)

The name of Gmelin is given as the authority for *this synonym*; I have not the means of verifying the correctness of this; but I believe that '*Puffinus Obscurus*,' (Gmelin) is *an inhabitant of Madagascar, and the Mauritius*; while '*Puffinus Obscurus*' (Anderton and Finsch) is the bird which frequents the *Bermudas, and Bahamas*' and would therefore *more probably reach the coast of Britain* than the Madagascar bird.

Dr. Bryant, who took the eggs on the Bahama Keys, says they are *highly polished*; but this is not the case with any of those which I have received from the same locality. I have several eggs, some taken in Doreenkay, April 4th, 1884, and some taken in Greenkay, Bahamas, April 6th, 1884. The nests among the rocks and boulders were discovered by the means of a setter; and the birds in several instances were taken on the nests. The texture, like that of the eggs of the other Shearwaters

and some of the Petrels, is difficult to describe : the magnifying glass reveals an appearance of the impression of innumerable pin points.

They vary in size a little from the egg in the collection of the Linnæan Society ; but do not approach the dimensions of the egg of the Manx Shearwater.

The bird is admitted to the B.O.U. List, and by Saunders, and by Seebohm upon two occurrences ; but as the latter justly observes, *other birds may have reached these shores of which fact there is no record* ; and indeed let us hope that some of the rare birds which visit us escape the ever watchful sportsman and naturalist.

THE PIED-BILLED GREBE.

(*PODILYMBUS PODICEPS.*)

Rejected from the B.O.U. List.

Rejected by Saunders.

Rejected by Seebohm.

The three authorities simply record the fact that the specimen was exhibited at the P.Z.S. 1881, by Mr. R. B. Sharpe, as having been shot in the previous winter at Radipole, near Weymouth: the authorities lay stress on the fact that it has *not occurred elsewhere in Europe*.

The eggs in my collection are in size and shape almost identical with those of *P. cornutus*. They were taken at Berlin, Wisconsin, on June 10, 1883, from a nest a large mass of weeds and rushes floating among water plants in shallow water.

A most unlikely bird to escape from confinement in this country.

THE FLAMINGO.

(PHÆNICOPTERUS ROSEUS.)

Not noticed in the B.O.U. List published in 1883,

yet the bird had *occurred twice*, namely, in August of 1873, and in 1881, the first occurrence it is supposed with reason may have been the 'escaped' from the Zoological Gardens, which Mr. Bartlett was aware of as having recovered its liberty in July of that year.

But *the second occurrence* in 1881, in Staffordshire, may have been of a wild visitant; inquiry having been made in likely quarters whether a bird had been missed; and there being none such recorded.

Admitted by Saunders,

on the strength of *the second occurrence* above mentioned: and of *a third* shot in Hampshire, concerning which the evidence seems sufficient: and of *a fourth* which was seen in August, 1884, but happily not shot.

Rejected by Seebohm,

on the score that these instances are more likely to have been birds escaped from confinement, being individuals of a species so extensively kept, than accidental wanderers from the bason of the Mediterranean.

THE SPUR-WINGED GOOSE.

(PLECTROPTERUS GAMBENSIS.)

Rejected from the B.O.U. List,

on the plea that the *four occurrences* were all probably 'escaped' from confinement. It will not escape observation what great numbers of recorded Geese are by one

or other authority concluded to have been once in captivity.

Rejected by Saunders,

as 'escaped' but admitted to place, and figure, *from respect to Yarrell*, who formerly included it in his 'British Birds.'

Rejected by Seebohm,

on the above plea.

The Egyptian Goose; the Bar-headed Goose; and the Chinese Goose, are also, all three, rejected by the authorities.

THE CANADA GOOSE.

(ANSER CANADENSIS.)

Rejected from the B.O.U. List.

The rejection ambiguously expressed.

Admitted by H. Saunders,

by reason of "*the large numbers which are observed, often flocks seen in different parts of the country, apparently in a naturally wild state; some pairs of which breed with us successfully.*"

Rejected by Seebohm,

as all escaped from captivity.

THE LESSER WHITE-FRONTED GOOSE.

(ANSER ALBIFRONS MINUTUS.)

Omitted from the B.O.U. List,

unless it be amalgamated with the White-fronted Goose

(*A. Albifrons.*) under synonym *Anser Erythropus* (Gray.)

Not admitted by Saunders,

to portrait, or special notice. He says that *no British killed specimen is known to be in existence*; but that in the Grimsby Market about the year 1875, where birds from the neighbourhood only are found, an undoubted example of '*Anser Erythropus*' of Linnæus was seen by Mr. Cordeaux; but sold before it could be secured.

Admitted by Seebohm,

to place and picture, but *no allusion made to the above slight record of its occurrence.*

THE WHITE-BELLIED BRENT GOOSE.

(*ANSER BRENTA LEUCOGASTER.*)

Omitted from the B.O.U. List.

Noticed by Saunders,

under the article on the Brent Goose (*A. Torquatus*), he gives it, however, no specific name; he says there are two forms of Brent Geese which visit Britain; one with light-coloured under parts; the other with darker breast, and abdomen which however is not *B. Nigricaus*, (this is No. 596 on the Bulletin of the United States Museum, published 1881, (*Bernicla Brenta*, the Black Brant, Cassin.)

Admitted by Seebohm,

who says that of the two forms which have occurred '*Anser Brenta*' and '*A. B. Glaucogaster*,' the latter is the rarest.

CASSIN'S SNOW GOOSE.

(CHEN ALBATUS.)

Admitted to the B.O.U. List.

There is certainly something to be cleared up in the question of the Snow Geese.

Saunders says (Yarrell's Birds, 4th edition, page 277) "the smaller to which the name 'Hyperboreus' properly belongs, and of which 'Albatus,' Cassin, is a pure synonym."

But the Bulletin of the U. S. Museum, 1881, gives 'Hyperboreus' as the sole specific name of 'The Snow Goose,' No. 591, 'Chen Hyperboreus' the Snow Goose.

The Lesser Snow Goose has two specific names 'Hyperboreus Albatus,' it is named after Cassin; it is No. 591a.

Admitted by Saunders,

who gives its name 'Chen Hyperboreus,' he says "*it is clear that the race obtained in the British Islands is the smaller one.*"

Admitted by Seebohm,

under the name 'Anser Hyperboreus.'

It will be seen that both these learned authorities are at variance with the American Ornithologists, who give this title to the larger form.

Mr. Seebohm, who has earned the thanks of every one interested in the subject, if only for giving the useful list of synonyms with their authorities, *notices* that 'Albatus' is reserved for the Lesser Snow Goose, and 'Hyperboreus' for the Snow Goose, by Coues.

In size the Lesser Snow Goose is rather less than the Snow Goose. It is at the present moment living in

the Gardens of the Zoological Society, London, where it is labeled 'Chen. Albatus.'

Mr. H. E. Dresser says the bird is 23 inches in length and the egg of 'Chen Hyperboreus' 3 ins. by 2 ins.; ovate in form.

An egg from the Anderson River was exhibited at the Proceedings of the Zoological Society, January 17th, 1871, it was 2.93 by 2.09 inches.

Mr. Seeböhm says the colour of the egg is described as of a uniform *dirty* chalky white, averaging 3.4 by 2.2 in.

Mr. Saunders giving the same measurement from Macfarlane, says the egg is said to be large for the size of the bird; oval in shape; and that Captain Lyons says they are usually 5 in number.

These dimensions, however, are above the measurements for the Larger Snow Goose, No. 591, 'Chen Hyperboreus,' as given in Davie's Check List of North American Birds, where they are said to be yellowish-white, elliptical, 2.85 by 1.95 inches.

Of three egg in my collection *one* was taken by Mr. J. H. Adams, from a nest containing six eggs, placed on the banks of the Anderson River, on June 28th, 1882; it is much nearer in conditions to the description by Davie, being elliptical; *pure*, pale, yellowy white; texture chalky; a surface which soon *becomes* "dirty"; no gloss, and measures 2.70 by 2 inches; upon the eggs of all other Geese that I have noted there is some appearance of gloss.

The second egg is similar to the first in its *very peculiar contour and texture*; but varies greatly in dimensions: it was taken in Alaska (where alone, according to Baird, the Lesser Snow Goose breeds), by Mr. S. D. Rice, on June 3rd, 1882; the nest, which contained 5 eggs, was placed upon the ground; the incubation was not begun; and the female was shot from the nest; its

dimensions are 3.09 by 2.18 inches. Dr. Coues says some eggs measure less than 3, by more than 2 inches; of these eggs my first mentioned is the smallest, and those found by Macfarlane the largest: I do not, however, know that the variation is more than that of many birds; of Bewick's Swan, for instance, which varies, according to Mr. Seebohm, from 4.30 to 3.80 in length, by from 2.65 to 2.55 inches in breadth.

My *third egg* was taken by Mr. M. D. Smith from a nest formed of grass, and weeds, on the marshy shore of the Great Salt Lake, B.A., on June 13th, 1882, the nest contained six eggs; the incubation had not commenced; it was *of the smaller dimensions* and of the *same unmistakable character* with the other described above.

BEWICK'S SWAN.

(CYGNUS BEWICKI.)

This bird seems to be restricted, by Mr. Seebohm, to the Eastern Hemisphere, and he says it does not breed in Iceland. Yet we learn from the U. S. 'Bulletin' that the description of birds killed at "Igloolik, in Arctic America latitude 66° on June 19th, 1823, is of the true *O. minor*, or *Bewick's Swan*"; and that it is "said to breed on the sea coast within the Arctic circle." Clearly if the birds were at Igloolik late in June, they must have been breeding in the Western Hemisphere; and the species would thus surely include Iceland in its breeding range. Concerning the egg in my possession, Herr Schlüter writes, "*This egg I received from my late friend Mr. Foster, of Copenhagen; it comes from Iceland.*" The egg is white as that of the Pink-footed Goose.

THE AMERICAN SWAN.

(CYGNUS AMERICANUS.)

Rejected from the B.O.U. List,

which says that none have been recorded since Mc.Gillivray obtained it from a poulterer, in 1841, in Edinburgh.

Five birds were found in a poulterer's shop, in Edinburgh, December 26th, 1879, which were stated, on dissection, to be 'Americanus'; the difficulty which arose as to the correctness of the diagnosis does not seem to have been disposed of as yet.

The writer in the "Glasgow Natural History Proceedings" says that 'C. Bewicki' is probably the rarer; *if they can be separated*; the measurements of 'Americanus' are the largest, including the beak of the young bird.

Not admitted by Saunders,

to place and picture, *who however does not give any opinion upon the discrimination of Mc.Gillivray; at any rate that occurrence was before the days when birds were brought over from America packed in ice.*

Mr. Seebohm says "it has possibly greater claims to be regarded as British than 'Buccinator'."

An egg I received was taken by Mr. J. H. Adams from a nest containing four eggs, on the Anderson River, on June 27th, 1882, it was dirty white; and of the same dimensions with 'C. Buccinator'; both being rather smaller than the egg of the Whooper.

Dr. Coues says the egg is $4\frac{1}{2}$ to 4 inches in length. Davie gives the size 4 by 2.50 inches.

THE TRUMPETER SWAN.

(CYGNUS BUCCINATOR.)

*Rejected from the B.O.U. List,**Rejected by Saunders.**Rejected by Seebohm,*

I have the egg taken by Mr. J. H. Adams on the Anderson River, June 27th, 1882; the nest, with four eggs, was placed on the ground; the colour is similar to 'C. Olor,' greenish white, it is much stained; the dimensions 4.27 by 2.94 inches.

THE BLACK SWAN.

(CYGNUS ATRATUS.)

This bird is altogether omitted.

If the accounts be correct: and Gray's authority valid: as it seems very improbable that this bird should ever have escaped from confinement *in a flock* there have probably been genuine occurrences.

Gray says, in his "Birds of Scotland," that *one*, from among some other Black Swans, was shot on Loch Lomond, in the winter of 1828-9.

That *another* was shot near Tunellan in 1863, which is in the Hunterian Museum, Glasgow.

And that Mr. Cliff, when duck shooting at night near Brechin, shot *a third* from among a flock of Black Swans, flying overhead, strong on the wing.

A fourth was shot at Coupar Angus, in November, 1867.

My eggs not quite so large as those of 'Olor' are, as might be expected from a dark species, of a deeper green than the eggs of the White Swan; they were laid in confinement.

THE BLUE-WINGED TEAL.

(QUERQUEDULA DISCORS.)

*Admitted to the B.O.U. List.**Not admitted by Saunders,*

to place and picture, who under the article on the 'Teal' passes the occurrences in review *without pronouncing his final conclusion.*

Rejected by Seebohm,

who says "eggs indistinguishable from those of the Garganey." I would submit that it may be found that the eggs of both the Blue, and Green-winged Teals, of America, have *less gloss* than the eggs of the Garganey, and Teal, of our country.

I have four eggs of this bird and they are *decidedly less glossy* than my sets of Garganey, and Teal.

My eggs were taken by Mr. W. H. King, at Eagle Rock, Idaho, on May 18, 1883. They have no gloss at all; and are smaller than those of the Green-winged Teal.

THE GREEN-WINGED TEAL.

(ANAS CAROLINENSIS.)

*Admitted to the B.O.U. List.**Not mentioned by Saunders.**Admitted by Seebohm,*

"because it has occurred twice and possibly three times in our Islands."

The eggs of this Teal so far as my limited experience goes are a little *glossier than those of the Blue-winged Teal.*

I observe that the eggs of both these Teal are *slightly smaller, and rounder* than the eggs of the English birds.

My eggs were taken by Mr. W. H. Palmer, at Helena, Montana, North America, on May 27, 1882.

THE SMEW MERGANSER.

(MERGUS ALBELLUS.)

Mr. Seebohm says the eggs of this bird are "indistinguishable from those of the Wigeon except by weight," being heavier.

But he has given some hint of the texture as discovered by Wooley, of which the ample and truly interesting account is preserved for us by Mr. H. Saunders.

It certainly is a *beautiful feature in the history of eggs the variety of surface*, the same fine grain of the egg of this bird is appreciable also in the eggs of *two more of the four* British species of Merganser; namely the Hooded Merganser; and Goosander Merganser; I have tested the eggs of all the other ducks, including the egg of the Red-breasted Merganser, and although, to the naked eye, the polish on many, as the Scoter's for instance, seems as fine: yet *when you hold the egg of those three Mergansers in one hand; and of any other duck in the other; if a person apply the nail test, you may perceive the difference in vibration up the forearm to the elbow.*

One of my eggs was taken by Henke, near Astrachan, Wolga, delta; the other received from Herr Adolf Neckhorn, was taken in Siberia; (Herr Tancre.)

So rare is the genuine egg that Wheelwright in his 'Sweden' says "*it is, of Scandinavian birds, an egg only less difficult to obtain than the egg of the Great Auk.*" Wolley's collectors in Lapland, in *ten years*, only succeeded in

procuring *eight eggs*. Were it not for the fine texture the egg of the American Wigeon is its fac-simile.

THE HOODED SHELDRAKE.

(LOPHODYTES CUCULLATUS.)

Admitted to the B.O.U. List.

Admitted by H. Saunders,

Admitted by Seebohm.

Rejected by Mr. Dresser from his "Birds of Europe." I believe, however, he admits the authenticity of a late occurrence; Lord Lilford's book will shew.

The name *for their own bird* given by the American Ornithologists, is not given among the synonyms in the B.O.U. List.

Among the occurrences, which have been justly received as reasonably authentic, I must think that the genuineness of the birds seen by Mr. J. Colquhoun should be admitted: he describes, in his "Sporting Days," how, when stalking an Eider Duck, in the Firth of Forth, 5th May, 1853, "*three ducks swam before him; the leading bird with a head like a Hoopoe; and the white patch distinctly visible which proclaimed it no other than the Hooded Merganser*"; but before he could reload his gun, they were out of his reach.

Audubon's description of the eggs is certainly incorrect.

I have a clutch of six eggs; more or less globular; they are like billiard balls, but of a purer white, and the shell so strong, that they click against each other like billiard balls; they were taken by Mr. W.W. Smith, 10th May, 1875, at S. Clair, Michigan, the nest, in a hollow oak stump, was lined with down upon small twigs.

Having regard to the Character, and amount of Evidence, which has been deemed sufficient ground for classing certain birds among the "British Birds": I think that a verdict for Enrolment upon the "British List of occurrences" should be conceded to the following birds:—

The Egyptian Vulture.
 The Gyr Falcon
 The Greenland Falcon.
 The Iceland Falcon.
 The Lesser Kestrel.
 The Swallow-tailed Kite.
 The Black-winged Kite.
 The Lesser Spotted Eagle.
 The Spotted Eagle.
 The Red-shouldered Hawk.
 The Red-tailed Hawk.
 The African Buzzard.
 The American Sparrow Hawk.
 The American Gos-hawk.
 The American Hawk-Owl.
 (Conspecific with European.)
 The Black-throated Ousel.
 The American Robin.
 (or, Migratory Thrush.)
 The Gold-vented Bulbul.
 The Blue Rock-thrush.
 The Black-throated Chat.
 The Red-eyed Vireo.
 The Desert Wheatear.
 The Barred Warbler.
 The Yellow-browed Warbler.
 The Wall-creeper.
 The Alpine Chough.
 The Great Northern Shrike.
 The Red-shouldered Blackbird.
 The Minor Grackle.
 The Rusty Blackbird.
 The Scarlet Rosefinch.
 The Greenland Redpole.
 The Rustic Bunting.

The White-bellied Swallow.
 The Red-throated Pipit.
 The Isabelline Night-jar.
 The Red-necked Goatsucker.
 The Blue-tailed Bee-eater.
 The Abyssinian Roller.
 The Great Black Woodpecker.
 The Hairy Woodpecker.
 The Downy Woodpecker.
 The Gold-shafted Woodpecker.
 The Black-billed Cuckoo.
 The Passenger Pigeon.
 The Rock Ptarmigan.
 The Barbary Partridge.
 The Martinique Gallinule.
 The Demoiselle Crane.
 The Pacific Golden Plover.
 The American Golden Plover.
 The Killdeer Plover.
 The Solitary Sandpiper.
 The Yellow-legged Sandpiper.
 Wilson's Snipe.
 The Bridled Tern.
 The Noddy Tern.
 The Adriatic Gull.
 Great Black-headed Gull.
 The Capped Petrel.
 Bulwer's Petrel.
 The Yellow-billed Diver.
 The Pied-billed Grebe.
 The Flamingo.
 White-bellied Brent Goose.
 The American Swan.
 The Green-winged Teal.
 The Hooded Merganser.

The following are 'British Birds.'

The S. Kilda Wren.
 (As conspecific with 'the Wren.')

The Black-bellied Dipper.
 (As a variety of the Dipper.)

Pallas' Grey Shrike.
 (As a variety of the Great Grey Shrike.)

The Parrot Crossbill.
 The White-winged Crossbill.
 (Local form of Crossbill.)

The Canary.

The American Pipit.
 (As conspecific with the Tawny Pipit?)

Pallas' Sand Grouse.
 The Spotted Sandpiper.
 The Dusky Shearwater.
 Brunnich's Guillemot.
 The Canada Goose.
 The Egyptian Goose.

Birds rejected from 'The British List' as doubtful.

The Griffon Vulture.
 American Red-legged Hawk.
 The Saw-whet Owl.
 The American Screech Owl.
 (or Mottled Owl.)
 Siberian Ground Thrush.
 The Dusky Bulbul.
 White-collared Flycatcher.
 Ruby Crowned Wren.
 Cetti's Warbler.
 The Mocking Bird.
 American Grey Shrike.
 The Cedar Waxwing.
 The Little Bunting.
 Black-headed Bunting.
 Red-rumped Swallow.
 Chestnut-bellied Swallow.

Grey-headed Yellow Wagtail.
 Middle Spotted Woodpecker.
 Three-toed Woodpecker.
 The Virginian Quail.
 The Soudan Crane.
 Schinz's Sandpiper.
 Ross's Gull.
 The Laughing Gull.
 The Cape Petrel.
 Spur-winged Goose.
 Bar-headed Goose.
 Chinese Goose.
 Lesser White-fronted Goose.
 The Trumpeter Swan.
 The Black Swan.
 The Blue-winged Teal.

Conjectural Derivations of Synonyms

NOT EXPLAINED IN THE B.O.U. LIST.

I have taken upon me to append a list of what I *conjecture* to be the derivation of those synonyms in the B.O.U. List which are not given there, and, for the benefit of those who have not learnt the Greek symbols, I have used English letters for the Greek roots.

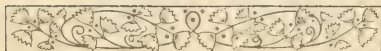
The Greek words are printed in English Letters, for obvious reasons.

White's Thrush (*Oreocincla*)—Cinclos, a Wagtail; Oreos, of the Mountain.
 The Blue Rock-thrush (*Petrocossyphus*)—Petron, a rock; Cossyphus, a Black-bird.
 The White-spotted Blue Throat (*Leucocyana*)—Leucos, white; cuanos, blue.
 The Chiff-chaff (*Phyllopneste*)—Phulleia, leaves; pneo, to breath; (live among).

- The Reed-Warbler (*Acrocephalus*, *Calamodyte*, *Calamoherpe*)—*Cephalos*, a head; *Acros*, acute, or pointed; the B.O.U. List considers Naumann and Agassiz both to be wrong for rendering *Acros*, acute. *Calamos*, a reed; *dutes*, a skulker; *Calamos*; *herpo*, I creep.
- Cetti's Warbler (*Bradypterus*)—*Bradus*, slow; *pteron*, a wing.
- The Dipper (*Hydrobates*)—*Hudor*, water; *bates*, one who walks upon.
- The British Long-tailed Titmouse (*Mecistura*, and *Acredula*)—*Mekistos*, very long; *oura*, a tail. And *Acredula*, a Nightingale.
- The Marsh Titmouse (*Poecile*)—*Poecilos*, variegated.
- The Crested Titmouse (*Lophophanes*)—*Lophos*, a crest; *phanes*, bright.
- The Wren (*Anorthura*)—*Anorthoo*, I erect; *oura*, the tail.
- The Grey-headed Yellow Wagtail (*Budytes Cinereocapillus*)—*Bous*, a cow; *dutes*, a croucher; (seeking flies probably.) *Cinereus*, ash colour; *capillus*, hair, (plumage.)
- The Pied Flycatcher (*Luctuosa*)—*Luctuosa*, full of grief.
- The Gold-vented Thrush (*Aurigaster*)—*Aurum*, Gold; *gaster*, the belly.
- The Red-backed Shrike (*Enneoctonus*)—*Enneos*, dumb with terror; *ktonos*, murder.
- The Red-eyed Flycatcher (*Muscicapa*)—*Musca*, a fly; *capio*, I catch.
- The Bohemian Waxwing (*Bombycilla*)—*Bombux*, a bird's windpipe?
- The White-collared Flycatcher (*Melanoptera*)—*Melas*, black; *pteron*, a wing.
- The Red-breasted Flycatcher (*Erythrostera*)—*Erythros*, red; *sternum*, the breast.
- The White-bellied Swallow (*Tachycineta*)—*Tachus*, swift; *cingo*, to girdle? Perhaps from swift flying Puck's boast: "I'll put a girdle round about the earth in forty minutes."
- The Mealy Redpole (*Canescens*)—*Canescens*, becoming hoary.
- The Pine-Grosbeak (*Strobilophagos*)—*Strobilos*, a pine cone; *phago*, I eat.
- The Snow-Bunting (*Plectrophanes Centrophanes*)—*Plectron*, a spur, *phaino*, I display; *Centron*, a goad; *phaino*, I display.
- The Starling (*Guttatus*)—*Gutta*, a spot; from its speckled appearance.
- The Rose-coloured Pastor (*Thremmaphilus*)—*Thremma*, a pet; *philo*, I love.
- The Chough (*Coracias*)—*Corax*, a crow.
- The Magpie (*Melano-leuca*)—*Melas*, black; *leucos*, white.
- The Crested Lark (*Galerita*)—*Galerita*, the Crested Lark of Pliny (perhaps from *galeros*, cheerful?)
- The Swift (*Apus*)—*A*, no (appearance of); *pous*, a foot.
- The Great Black Woodpecker (*Drycopus*)—*Drus*, an oak tree; *copto*, I strike with beak.
- The Great Spotted Woodpecker (*Pipra*)—*Pipra*, a bird of undefined species.
- The Great Spotted Cuckoo (*Oxylophus*)—*Oxus*, pointed; *lophos*, a crest.
- The Snowy Owl (*Nivea*)—*Niveus*, snowy.
- Scops Owl (*Ephialtes*, and *Zorca*)—*Ephialtes*, the nightmare; *zorca*, from *derco*, I see, from its beautiful eyes.
- The Little Owl (*Psilodactyla*, *Nudipes*, *Carine*)—*Psilos*, smooth; *dactylon*, finger or toe; *Nudipes*, *nudus*, naked; *pes*, foot; *Carine*, a funeral mourner.
- The Egyptian Vulture (*Cathartes*)—*Cathartes*, a purifier, (scavenger).

- The Hen Harrier (Pygargus)—Puge, a tail ; argos, white.
- The Swallow-tailed Kite (Nauclerus)—Nauclerus, a pilot ; but why ?
unless for its wandering proclivities, see art. on the bird.
- The Merlin (Hypotriorches)—Hupo, akin to ; Triorches, a buzzard.
(But is it ?)
- The Red-footed Falcon (Rufipes, and Erythropus)—Rufus, red ; pes, a foot, and Eruthros, red ; pous, a foot.
- The Cormorant (Halieus)—Harlieus, a fisher.
- The Great White Heron (Nigrirostris)—Niger, black ; rostrum, a beak.
- The Squacco Heron (Buphus, and Comatus)—Bouphos, a bird, a bittern,
and comatus, long haired (plumage.)
- The Glossy Ibis (Igneus)—Igneus, fiery (with bright reflections.)
- The Brent Goose (Torquatus)—Torquatus, collared.
- The Black Swan (Atratus)—Ater, black.
- The Whooper Swan (Xanthorhinus)—Xanthos, yellow ; rhin, the nose,
(or beak.)
- The Pintail Duck (Dafila)—Da, very ; phile, familiar ?
- The Teal (Crecca)—Creco, to produce a sound with the beating of wings.
- The Shoveller (Rhyncaspis)—Rhunchos, a beak ; aspis, a shield (spatulous)
- The Red-crested Pochard (Aythya)—Au, back ; thuo, I rush (perhaps
from its habit in the decoy net.) No! Αἰθυῖα αὐτοῦ
- The White-eyed Duck (Leucophthalmos)—Leucos, white ; ophthalmos,
an eye.
- Steller's Duck (Dispar)—Dispar, unlike (the Generic name is explained
as 'unique.')
- The Turtle Dove (Auritus)—Auritus, eared.
- The Quail (Dactylisonans)—Dactulon, a finger ; sonans, sounding.
I believe because the cry is exactly like snapping the finger
and thumb (short, long, short,) not because it is like a dactyl
(long, short, short.)
- The Hemipode (Hemipodius, and Tachydromus)—Hemis, half ; pous,
a foot, and Tachus, swift ; dromos, running.
- The Spotted Crake (Ortygometra)—Ortygometra, a landrail.
- Baillon's Crake (Pygmæa)—Pugmaios, dwarfed.
- The Purple Gallinule (Veterum)—Veterum, of the Ancients ; (probably
as "known to the Greeks " see B.O.U. List.)
- Macqueen's Bustard (Eupodotis, and Undulata)—Otis, bustard, (with)
Eu, clever or beautiful ; pous, foot, and Undulata, wavy
(markings.)
- The Stone Curlew (Crepitans)—Crepitans, chattering.
- The Kentish Plover (Ægialophilus)—Aigialos, the sea shore ; philos,
fond of.
- The Black-winged Stilt (Hypsibates)—Hypsibatos, one that stands
high.
- The Red-necked Phalarope (Angustirostris)—Angustus, narrow ;
Rostrum, the beak.
- The Grey Phalarope (Platyrhynchus)—Platus, broad ; rhunchos, a beak.
- The Woodcock (Sylvestris)—Sylvestris, woodland, from sylva, a wood.
- Bonaparte's Sandpiper (Pelidna)—Pelidnoo, from Pelos, lead colour ?
- The Pectoral Sandpiper (Limnociclus)—Limne, a lake ; Cinclos, a bird
that wags its tail.
- The Little Stint (Actodromas)—Acte, the sea shore ; dromos, a runner.
- The Curlew (Ancylocheilus)—Anculos, curved ; cheilea, lips, man-
dibles.)

- The Ruff (*Philomachus*)—Philos, fond of ; mache, fighting.
 Bartram's Sandpiper (*Actitis*)—Actites, a frequenter of the Sea Shore.
 Green Sandpiper (*Chloropus*)—Chlorus, green ; pous, foot.
 The Greenshank (*Glottis*)—Glottis, the windpipe ?
 The Roseate Tern (*Paradisea*)—Paradeisos, Paradise ?
 The Caspian Tern (*Sylocheleidon*, and *Hydroprogne*)—Sulon, prey ;
 chelidon, a flying fish, and Hudor, water ; progne, swallow.
 The Swift Tern of Roupell (*Velox*)—Velox, swift.
 The Gull-billed Tern (*Gelochelidon*)—Gelo, laughter ; chelidon, swallow
 Boys' Sandwich Tern (*Actochelidon*)—Acte, Seashore ; chelidon, swallow
 The Whiskered Tern (*Leucopareia*)—Leucos, white ; pareia, cheek.
 The Black Tern (*Fissipes*)—Fissum, a slit ; pes, a foot.
 The Ivory Gull (*Cetosparactes*)—Cetum, a whale ; sparrasso, I pull to
 pieces.
 The Black-headed Gull (*Capistratus*, and *Chroicocephalus*)—Capistrum,
 a headstall ; and Chroo, to discolour ; cephalon, the head.
 The Little Gull (*Hydrocolæus*)—Hudor, water ; coloios, a jackdaw.
 The Pomatorhine Skua (*Lestris*)—Lestris, a robber ; (the Skuas rob the
 Gulls of their fish.)
 Buffon's Skua (*Longicaudus*)—Longus, long ; cauda, a tail.
 The Storm Petrel (*Thalassidroma*)—Thalasse, the Sea ; dromos, a
 runner.
 The Great Northern Diver (*Eudytes*)—Eu, clever ; dutes, a diver.
 The Red-necked Grebe (*Rubricollis*)—Ruber, red ; collum, a neck.
 The Puffin (Mormon)—Mormon, an ugly mask.





A Few Remarks upon 'Evolution.'

I not unfrequently see it affirmed that persons who have turned their attention to Natural History, are being generally converted to the Darwinian theory of development of all the living creatures of this planet from a common Ancestor 'protoplasm,' I greatly doubt this.

Those who have ventured to differ from that view are thus 'scouted,' "*The Zoologist, the Palæontologist, the Embryologist, . . . are all Darwinian to a man, and they scout the 'lazy yawning drone' who eats of their honey buzzing the while dissatisfaction at their work and their song.*" (Mammalian descent by Professor Parker, page 5).

This Darwinian taint has greatly destroyed the exceeding pleasure derived formerly from books on Natural History; not only for *serious reasons*; but through the manifest *straining of facts* to serve one purpose.

Per contra, Darwin, in his 'Origin of Species,' corrected to 1872, published 1884, speaking of the difficulties held by those thus 'scouted' says (page 289) they are "*undoubtedly of the most serious nature, we see this in the fact that the most eminent Palæontologists, namely, Cuvier, Agassiz, Barraude, Pictet, Falconer, E. Forbes, &c., and all our greatest Geologists, as Lyell, Murchison,*

Sedgwick, &c., have unanimously, often vehemently, maintained the immutability of Species."

Lyell being, however, claimed as a later convert from the unanimity of the great Geologists.

But persons who have raised their voices, vehemently, *or calmly*, in defence of the Revealed Record, as against the speculations of those learned men who, having this theory on the brain, have ransacked nature for facts to support it, are *more than* "scouted." Professor Parker, in his ninth Hunterian Lecture, brings forward Bacon (who, whatever else he was writing of, certainly was not occupied with Darwinism), as saying that those who uphold the idea that God works except by '*second causes*,' are guilty of offering '*to the Author of Truth the sacrifice of a lie*.'

And further implies that those who uphold "*the book of God's word*," against the new book of man's word, are simply doing so to curry favour with God.

Certainly Bacon encourages philosophers to a proficience in the *Book of God's works*, but he warns them to apply it "to charity and not to swelling."

What do others feel when, noting the spirit in which their faith is handled, Dr. Rêville even can write, "*Mr. Gladstone is quite right in protesting against the brutality with which the venerable roots of the ancient faith are sometimes treated*."

Westcott, is then quoted by Parker as saying, in his '*Gospel of the Resurrection*,' "*Theology accepts without the least reserve the conclusions of Science as such*."

This is manifestly quoted to lead men to believe that Dr. Westcott's view is, that Theologians accept "without the least reserve" the scientific conclusion which is the burden of the honeyed song to which Professor Parker's lectures are set, viz., the Darwinian Funeral Chant.

The Clergy of our own Reformed Church are certainly not bigoted: what different treatment at their hands Galileo, and Darwin received at the last. Yet not the noble *sciences*, Astronomy and Geology, but the baseless *theory* 'Evolution,' it is that that has sapped the faith of thousands. Alas that the fair study of Natural History, should have become involved in so base a web, web spun from its own entrails.

Does this liberalism warrant one (writing up the Roman Church) in saying "*Unless a man is a Catholic (i.e. Romanist) his notion of God, the Bible, may be such as would appal the Saints, the Fathers: . . . such is the fact: . . . 'Are we Christians?' was the challenge flung out to Liberal Protestants, to the Stanleys, the Fowetts, the Arnolds, by Friedrich Strauss, in his disquieting 'Confessions.'*" Is it true, as further stated, an "enlightened" Protestant (the force being in the suggestion that it is only a Protestant that is thus "enlightened") takes his views from the world of science around him, nor can tell the meaning of Scriptural texts until he has enquired, not of Church Councils, but of the Royal Society, and Herbert Spencer.

Dr. Bastian, writing upon 'Spontaneous Generation,' held that this also was Darwin's view; that it was the view of Darwin, Huxley, and Spencer, that "*living matter came into being independently,*" (Nineteenth century, February, 1878); if this be so are the Clergy clear upon these points. The Rev. R. St. I. Tyrwhitt, who says, amusingly enough, "*There is a provoking simplicity in the now popular Atheistic endeavour to assert Evolutionism as a creed: it is like sliding in an unknown Creator, into an Atheistic system, as if he were a surreptitious King at Ecarte;*" also says, "*what is there, after all, which is contrary to any form of the Christian Faith in Mr. Darwin's hypothesis itself?*" Yet Dr. Bastian brands it as Atheism, which evolution, however Unchristian, is not always.

Darwin's views were quite contrary to the Christian Faith.

Darwin's answer to the Jena student who applied to him saying: Tell me your creed, for by reading your works my own faith has perished; speaks for itself, "*Science and Christ have nothing to do with each other . . . as far as I am concerned I do not believe that any revelation has been made. With regard to a future life, every one must draw his own conclusion from vague and contradictory probabilities.*" (*Spectator*, 1882.)

The very substitution of Darwin's expression, 'organism,' in the place of the old word, 'creatures,' seems to warrant the fear that the Creator is being banished from his Creation.

The inherent capacity, true to a limited extent, of each so called 'organism' to exercise '*variation*'; and '*Natural selection*,' '*sexual*' and *otherwise*, to make it *fittest to survive* in the '*struggle for existence*.' The extreme declaration of this, combined with the bold statement that there has never been Special Creation *since protoplasm, if even then*, never *Creation of pairs*; but that the Prawn, the Elephant, the Spider, the Man, have all gradually been developed, or developed themselves, through the Geological ages from protoplasm; in obedience to an inherent power for variation, or law of necessity, this doctrine is finely touched in the Laureate's latest volume:

"How far through all the brake
That Nightingale is heard,
What power, but the bird's, could make
This music in the bird."

We are asked to believe, when it is pointed out that there seems *none of this self-development now in progress*, that the organisms have reached their *climax*; that we live in the *era of arrested development*, for necessity no longer impels.

But watch *the Monkey's* eloquent eye as, with outstretched arm, it silently craves the biscuit or nut, with which the schoolboy tantalises it; and consider what a boon articulate speech would have been; could it but have attained to the power.

How comes it that the Dog, with tongue, lips, palate, teeth like Man, has, in all these ages, never been taught to utter a syllable: while the *Parrot*, with its hard beak, and round tongue, can chatter sentences by the hour; in a way that only those who have heard a first-class bird can credit.

How is this, if God has simply granted to protoplasm to develop according to its *necessities*: why are the organisms arrested where they are?

How greatly it would have tended to *its survival* if the Great Auk had *developed efficient wings*; instead of contenting itself with waddling up and off the rocks of its wild home. If, however, these same wings were among the things in *process of being 'aborted' through disuse*, it must be conceded as a great mistake.

It is not that we would hesitate over the power of God to do this thing, to work by development, *had he so decreed*: for we see, in an infinity of instances, that he is doing equal wonders daily. For example the gigantic Whale is rapidly developed from an egg of the same dimensions as that which develops into the common fern.

Nor do we stumble at the idea that he has granted *some capacity for variation*: as we are continually reminded in the case of the varieties of forms developed by Man's care, and notably from the Rock Pigeon (*we do not hear so much about their certain tendency rapidly to revert to the original form if neglected.*)

But what many believe is that He has not acted so:

and *not a single proof* has been brought forward to show that the creatures *are*, or *ever were in a transitional state* between one well-defined genus, and another.

The species are a different thing altogether, they are family individuals ;

And the Naturalists are at variance as to what constitutes a species, as distinct from its nearest kin : nevertheless, the Great Grey Shrikes (which *refuse by interbreeding* to carry out the theory of 'Evolution,' yet are so indistinguishable by man as to involve a controversy upon conspecific, and subspecific distinction), by their discrimination prove that the species *know more about the matter* than their historians.

But the links between the Families appear to be not so close ; and it would surpass man's power to develop from a pigeon either a *new family*, or a representative of an *old family*, not a hawk from a pigeon, not even a cuckoo, or a thrush.

It is very questionable whether many of Man's developments are not as *detrimental* as the hoofs of the Falkland Island wild horses ; from the well-built, clean-footed Rock Dove, with its vigorous flight, he has succeeded in producing the bulky-throated Pouter ; the cataleptic Tumbler ; and birds with their feet sprouting long disabling feathers : or their heads merged in a mass of plumage. And the Wild drake, which Yarrell thought one of the most harmoniously exquisite designs of colour, with its boat-formed body ; man has succeeded in improving upon by a variety of unwieldy descendants ; like neither to ducks ; nor to geese ; with every variety of pattern, and patch of plumage ; his cattle may be more eatable, and vendible than their ancestors ; but who shall say that even the prize pig is an improvement upon the wild boar ; except for mercantile purposes. And after

all, *this success, such as it is*, touches the point of 'Evolution' no more nearly than Darwin's doves touch.

Because man, in a short space of time, has produced the legs of the horse to those of the racehorse, by selection; are we to believe, by drawing infinitely on the bank of time, that drought, acting detrimentally upon foliage, has caused the legs, shoulders, neck, and tongue of the Giraffe to reach their present dimensions in the "*struggle for existence*."

Whether is it easy to accept these views, or the view of *Creation of pairs*; culminating in the Creation of Man, and man's responsible Soul: and this, without *pressing* every item in the revealed account; without insisting that the Red Grouse was created expressly for these Islands; or Usher's view that the world has lasted exactly 6,000 years.

What is the difficulty with those, who, not believing in a fortuitous concourse of atoms, or of gases, as the origin or species; but believing that after all everything is the result of the Creator's energy, what difficulty is there in the idea that (for all there is, or seems to be, implanted in the creatures a certain inherent power to develop in directions useful to themselves), the instances detected of links between species, and genera severally, may be simply instances of *specially created links: even as the only message worthy of credit* from God has declared to be the case: albeit the *language* in which the message is couched, to be intelligible, *could* only march '*pari passu*' with *the knowledge to which man had attained, at the date of its delivery*.

How vainly men of deep research have striven to find *the missing link*: and to prove the antiquity of man to be older than Moses saw in Seer's vision. But Geology still shows that He was the last, as well as the noblest of God's handiwork.

In the middle Miocene age there are no remains of Mammals such as at present are extant with us.

One huge Ape 'Dryopithecus' has been discovered in that age, with huge canine Gorilla-like teeth, also in the Miocene an Ape 'Semnopithecus,' and a slender Ape 'Mesopithecus,' but Hartmann tells us, "the opinion gains ground that Man cannot have descended from any of the fossil species which have hitherto come under our notice." (Anthropoid Apes, Hartmann.)

The famous 'Neanderthal Skull,' which created a sensation, has been judged by Pruner to be that of an idiot; by Virchow the skull of one diseased; and denied by Huxley to be that of a link between Man and Ape.

As there is no trace of Man in the Miocene, so is there none of his works; The Thenay Flints (Miocene) are doubtful in the opinion of Gaudry; and Hartmann says "*The alleged presence of shaped flints in the Miocene age still demands careful consideration.*" Shaped and unshaped flints are often indistinguishable; bones, grooved by Man, have turned out to be scored by Hyæna teeth. Gaudry says of the Miocene flints if these are shaped, it was 'Dryopithecus' that shaped them, but 'Dryopithecus' he calls an "interesting hypothesis" there are of him only a few fragments of bone.

A jawbone, supposed to be that of Primitive Man, was found by De Perthes at Abbeville, it deceived scientific persons for a time, and proved a gigantic imposture.

When man does appear he appears *perfect at once*: A skull found by Virchow, in a grave of the stone age, was remarkable for its unusual beauty, as well as size; so that it appeared to have belonged to a highly organised type.

To account for the *absence of all proof* of Evolution we are unceasingly told that the earth's crust has been

insufficiently explored: and that, when it has been more extensively investigated, all these speculations, which at present serve as premises upon which theories are built, will be discovered to have been sound, to the confusion of all who, hesitating to accept deductions drawn from premises taken for granted, decline to exchange an old faith for a new one.

Ordinary Students who feel that there is *no argument against a prophecy*; and confess that they are unable to cope with the prophet, who is also a scientist of renown; these are thankful to feel that there are yet many men, *of equal renown*, who have, with equal understanding, investigated all the arguments, embryological, and the rest; and for all this still hold by the old light that God has revealed to His creature Man, the manner of His creation; that He was a special creation; creation of a pair: unlike Aladdin's mother they prefer their old lamp.

The effort once was to prove the *exceeding antiquity of man, and his tools*; that is to say Man, as he now is, intelligent. But as it seems clear that even the *bank of time* (so far as the earth's crust is concerned), upon which such huge drafts are necessary, is not absolutely inexhaustible, *the further* intelligent Man is removed back in era, *the shorter the time* for his development from the same arboreal ancestor that is claimed for him, and for the so called 'Anthropoid' Apes. Unless in his individual case, the animal *proceeded 'per saltum,'* as has been distinctly claimed, and as distinctly denied to the organisms.

But then *where is the difference between this immense leap*, and a *special creation*; surely this latter is as credible and far more intelligible than the former.

Evolutionists and Geologists agree that each Geologic era held its special species, surely Special Creations.

Without doubt, had God left us *without a hint* upon this interesting subject ; had there been *no message*, or that message never been *confirmed*, as the Mosaic record is in principle confirmed, by quotation by Christ, The Word, *by whom all things are, and were created* ; by S. Paul, who assigns to "*every seed his own body* : " it were quite as easy to believe in our common descent from protoplasm, through countless *Æons*, as to believe what we know true by experience that ourselves are developed in *a few short months* from what is similar to protoplasm.

But we need not study Embryology to see the grandest development exercised in the *briefest space of time*. We need look no further than the Peacock, *annually* moulting, and rapidly reproducing his matchless train of tail coverts ; if we ask how is it done ; the only intelligible answer is by the power of God ; it is *no more of the bird, than the music is of the Nightingale*.

Is it more difficult to believe in that beautiful bird's special creation : or to believe that *some inferior* form, by a succession of vigorous, and yet more healthily vigorous offspring ; which, by that vigour, *survived* fittest in the *struggle for existence* ; which, by constant display before the hen bird, and by her *selection* of the more brilliant of her courtiers, did, *through a cycle of time*, gradually produce the splendid train ; and achieve the glorious neck plumage of the present so beautiful bird.

For all that Kingsley in his "Water Babies" represents Dame Nature as letting her creatures make themselves ; (Bacon's "Second Causes") this process of development (of which the energetic guidance must still be admittedly Divine, and indeed is ungrudgingly allowed so to be by some that have followed Darwin) ; is more difficult to credit than the doctrine of special creations as revealed in the Word.

Learned men have not been above pointing out that God's Word (using language not in advance of the date of its edition), speaking of the Fixed Star, the Sun, describes it as "*running about to the end of it*" (the world), the same men who are professed admirers of what they term '*Sunrise*' and '*Sunset!*'

If in former times men, who were jealous for the Faith, were *unwilling to give up anything* to them who would *take all*, and could *give nothing* in its place; mindful of how much depends upon the truth of the only message from God which man holds in his hands; Man's resurrection depending upon Christ's: Christ's advent being unintelligible without the Fall: the Fall being unintelligible in the 'life history' of an 'organism,' developed from an arboreal ancestor such as Darwin claims, (for on what conceivable platform, whether Prototherian, or Metatherian, did innocence become guilt, calling for the rescue of Christ), where is room for surprise.

What if these now admit that certain points in the Mosaic Record, always obscure, must be conceded before the advance of science; still enough remains not only uncontradicted, but confirmed by modern research, in the eyes of all who read aright.

For we hold the broad statement that, by special acts of Creation, a series of Creatures; increasing in beauty, and rising in organization, till perfection is reached in man, have been successively placed upon the globe by God working upon one homogeneous plan. As Professor Haughton of Dublin University says "As the Creator arranged conditions of life upon the globe physically suited to various creatures; He placed *in succession* by His own will creatures suitable to those conditions to enjoy them."

No less a man than Mr. Froude writes "*the creed of*

eighteen centuries is not about to fade away like an exhalation, nor are the new lights of science so exhilarating that serious persons can look with comfort to exchanging the one for the other."

Of the Eutheria, or Placental Mammals, Doctors, foremost among the scientific followers of Darwin, place the horse, lion, cow, sheep, and many others, as only developed to their present form about *the time* when Man himself had reached his present development.

The same chronologic arrangement is gathered from the Geologic record: this Huxley also admits. And how completely it *coincides* with the revealed record in point of *order, and date*; the difference of opinion being as to whether they were *fresh creations*; or *developments from older forms*.

Darwin's statement, that *species seldom outlast their own Geologic era*, should imply the former, viz., the *fresh* series of creations; *Geologic revelation distinctly contradicts the theory of transitional species, and is not at variance with the Divine revelation*.

That the Embryos of the creatures in so many, perhaps all, orders, and families have possessed, in the early stages when they seem little in advance of protoplasm; and which, even in later stages, possess many, or even most features in common; surely only suggests, what Comparative Anatomy long ago proved, that all are fashioned more or less on the same plan by the same Almighty hand. And it may well be that there is nothing physical in Man that is not common to one, or other of his fellow creatures; his inward anatomy, and his outward bodily appearance.

There may even be some creature whose eyelid, like Man's, does *not closely surround* the iris of the eye, but exposes the conjunctiva to view. I have seen no mention of such.

And all that Comparative Anatomy has made manifest and Embryology implied may be freely admitted as trustworthy. But not so the theories deduced from those sciences; to enforce which theories an immense amount of *missing confirmation* is taken for granted: and upon these frail premises, a quasi-solid superstructure of guessed facts is being built.

For example to one who, like myself, "occupies the place of the unlearned," it appears that Professor Parker takes much for granted in his remarks upon 'Prototheria;' (primary mammals) he finds in the two 'Monotremes' teatless mammals ('Echidna' and 'Ornithorhynchus;') that which connects them with Reptiles, and Birds: and he places them on a lower stage of organisation or development: and because thus lowly organised, as he elects to describe them, he ranks them below the 'Metatheria,' the Marsupials; not only in organisation, but also in development (which implies order of time) and states that they correspond with, or survive from organisms, of a similar character; which *should be found* in an earlier stratum of the earth's crust.

He thus claims to know that *there were* Prototheria, and that two types "*linger on this planet;*" he claims that these being Prototheria are thus *still co-existent* with the Metatheria, and the Eutheria, (the clever mammals).

This is his structure; but he presently discloses that he has been *guessing back*, not only for the form, but for the very existence of these Prototheria; he says the *data are wanting to show what a primary ancient Protothere was like.*

Then he guesses that these undiscovered types possessed teeth; although the living types have none; and proceeds further to speculate upon their character, as of a simpler kind of tooth than that of the Metatheria (Marsupials).

And finally he *contradicts* Darwin, who held the view ' *Natura non facit saltum* ' (Nature does not leap), and says he is "considering sudden, *per saltum*, transformations" on page 29 ; and on page 31. Speaking of these Prototheria (which he has too much taken for granted) he builds up this fact : " *Proof is not wanting now that some of the lower Eutheria, or high beasts, rose rapidly from Prototheria without utilising the Metatherian, or intermediate condition, they did not wait to become marsupials, but ran up on to the top platform before they attained the adult condition.*"

Moreover, it is taken for granted that, *if* the Mountain Limestone could speak, it would tell abundantly of Prototheria. Unfortunately the only utterance has been a few jaw bones ; which are as likely to be Marsupial, as Monotrematous ; and, having teeth, perhaps even more likely. But upon as small an amount of evidence as this, if it be evidence at all, his Prototherian theory is constructed, together with all it involves.

It is a bold effort to forge a more primeval link than has yet, by any valid evidence not to say proof, been discovered, to connect our Eutherian selves with protoplasm through Prototherian types.

Our own ancestors, it would seem, did not dawdle on the Metatherian platform, but became '*adult*' without its assistance.

Professor Huxley, in his 'Nineteenth Century' controversy, with Mr. Gladstone is more cautious ; and contents himself with speculation upon the date of the appearance of Man upon this earth, in his comparison of the priority of existing Mammals.

He says, although he admits that he is *unsatisfied* so late as the end of the year 1885, there is no evidence that any trace of Man has been found even in the Pliocene

(more recent) period. He says that yet he thinks "it is quite possible that *further research will show* that 'Homo Sapiens' existed, not only before 'Equus Caballus,' but before many of the other existing forms of animal life.

A single relic of Man, found in an earlier Geologic epoch than had furnished trace of the Horse, would certainly be put to the account that Man *preceded* the horse in date, (as opposed to the Mosaic sequence) by some Scientists (but is it not the fact that trace of the horse, though not furnished, might well exist in a still *earlier* formation), the Professor, indeed, seems to imply that the above would be his own conclusion, for he says that in the event of 'Homo' being traced, as existent before 'Equus,' then, "*if all the species of animals have been separately created, man, in this case, would, by no means, be the consummation (the crown) of the 'land-population.'*" The deduction is no more convincing than many another. Mr. Darwin said once that he admitted, to his cost, a constant tendency to fill up the wide gaps of knowledge by inaccurate and superficial hypothesis.

In the controversy which lately appeared in the 'Nineteenth Century,' Mr. Huxley makes something of Mr. Gladstone's natural admission that he is no Scientist. Others will care little for that fact, we are content to have here a 'master mind' capable of comprehending all that Scientific men have adduced in favour of Evolution, and against Revelation, which mind, after careful study, has not been seduced from the "faith once delivered."

The doctrine of Evolution, moreover as it appears to me, strikes a fatal blow to the theory that the *various races of men do not spring from a single pair*; as men are declared to do in the Bible.

For if they do not spring from a single pair, and Evolution is true, it must be that *a considerable number*

of the progeny of Darwin's arboreal ancestor have descended in pairs by parallel lines, through countless cycles of time, and by use of '*variation*,' '*natural*,' and '*sexual selection*,' '*survival of the fittest*,' and what not, have guided, or been guided in, their development until they reached, by a *coincidence* incalculably wonderful, almost *synchronously* the marvellous '*consummation*' of their species, the divers races of men: (certainly as books are written and read in these rapid days, the impression is, as a rule, left on the reader's mind that the '*organisms*' have guided themselves: protests against this natural deduction are very rare). It is too much to ask, even of credulity to accept *both the above antagonistic theories*; yet both have been advanced against the Divine Record which has been received by us.

I believe that Mr. W. E. Brook suggests that Monkey is as likely to be degraded Man; as Man "adult" (Professor Parker's word), monkey.

The mention of credulity reminds me that in no way is it more severely taxed, to keep up with the increasing demand made upon it, than in the matter of '*Mimicry*.'

I believe that Mr. Bates has the credit due to the invention of this idea; and Mr. Wallace has enthusiastically adopted and illustrated it.

I understand it to be that for '*protective causes*' (anglice, safety), certain species have either *gradually*, or *at once* '*mimicked*' other species, genera, and even substances, more safely guarded from destruction, or for '*survival*' in the '*struggle for existence*.'

There are the well known examples of the Butterfly which mimicks another butterfly unsavory to birds; and the weaker '*Oriole*' which mimicks, and consorts with the stronger '*Honey suckers*' (nevertheless '*oriolus*' is not as a rule a genus unlikely to survive in the '*struggle for*

existence' through lack of fitting advantages). But why such varieties, if they be varieties, should not have been *pecially created* does not appear. Our own 'Lappet moth' (*Lasiocampa Quercifolia*), which at rest looks like a dead beech-leaf (*Fagifolia*)? for its protection, has never been exalted into a 'Mimick.'

Indeed if the 'mimicry' has been carried into effect 'by a leap,' in defiance of 'Nature's rule' as laid down by Darwin, *does it not amount to a special creation.*

The term Mimicry implies action, and change.

The case of the Spider which, lying on its back with black legs folded over the white abdomen, in the centre of its smeary looking web spread over a leaf (an exact imitation of the excreta of some bird lying upon the leaf's surface), is a case as much to the purpose as any.

If that spider, through countless cycles of time, has *gradually developed* the image which is its necessary safeguard; *how was it preserved when the mimicry was but commencing?* (an idea to be carried undeviatingly on from generation to generation), *how not extirpated during the process to perfection?*

If on the other hand it *suddenly assumed* the likeness so necessary to its preservation, either it was by the insect's own power of 'Natural Selection,' or by the energy of the Creator, in which case it amounts to *a new creation.*

The whole subject of Natural History now lies environed by 'Evolution' as in the arms of a cuttlefish whose opponents are confused by an ink-cloud of vaguely worded suggestions, and vaguer guesses.

Broad views are claimed by the Philosopher, as in bright contrast to the *narrow views* of the Theologian: may be that the reverse is the real truth.

One contracted view charged against the latter is that he holds all the beautiful creatures of this earth to have been made for his special delight.

Perhaps he really holds that *the Creator, in creating them for His own delight, had in view the pleasure they would give to his supreme effort, Man's 'reasonable soul.'*

To this it is questioned, to what purpose, through long eras, have 'Papilio,' and 'Paradisea' wasted their marvellous beauty in the groves of the Papuan, and Malay; beings who take no delight, nor remark beauty in them (no more delight, it may well be, than the English labourer takes in 'Vanessa,' or in 'Pavo,' as he sweeps over the lawn of the village Hall): that the beauty, and time were alike wasted, until the arrival of 'Homo Sapiens,' to pin the one into his collecting box: and stuff the other with cotton wool and cork. But then, on this late arrival, *they are at length appreciated*; and their pictures taken; and themselves stuffed; and their history written; and the naturalist world delighted.

Even if the idea concerning the Papuan Man be the truth, which may fairly be doubted, is it not *the broader view* that God could create, and bide his time for the arrival of Educated Man to admire his creation; for after all it would seem that the end has been accomplished in the visit of Mr. Wallace; and thus the broader view is, that God could afford to wait until the beauty of his creatures were fitly appreciated by the one Being capable of so doing.

Creatures each doing his share *to raise man's eyes to his Maker*, but failing woefully where they only serve to give him more 'data' wherewith to make *the Almighty contradict himself*. Why is it thought a thing impossible that all these glories have been made, *among other results*, to delight, and raise the eye of Man. He who spared not his Son, but gave him up to be a sacrifice for sin; how should he not, with Him, freely give all things to one made in His own Image.

Professor Huxley also sees *this* difficulty to the doctrine of 'Special Creation,' that it would necessitate *the acceptance of a vast series of 'Special Creations,'* each series of species contemporaneous with its own geologic era (exactly as they *are* found within the bowels of the earth; *series succeeding series 'per saltum,'* itself a contradiction to the theory of Evolution); but why should there not have been a *vast succession of series*; is anything too hard for the Lord. Moreover He has Himself *spoken of such succession*; he has given us a *list of six series* in Genesis 1, a quite sufficiently long one for all but exacting science.

And if the Series are, *or are stated to be*, out of their order somewhat, it is beside the matter whether the upheaval, or subsidence has taken place among the earth's strata, or among the verses of Genesis. The Professor, who professes himself familiar with the elastic capabilities of Hebrew Exegetes, should know that Divines who even hold Literal Inspiration of the sacred scriptures, do not therefor necessarily hold Literal Preservation of the same: the errors of Copyists; the introduction of Marginal notes into the text by 'vivà voce' Amanuenses. The Variations found in the Septuagintal version; and other matters have been taken into account; yet enough remains to preserve this amongst other records, that the Series of Special Creations culminated in Man.

But not Hebrew Exegetes alone shift their grounds. If my memory serves, I believe, within the twelvemonth re-arrangement or modification of the settled descent of Man himself has been rendered necessary through new discoveries concerning the reproduction of the Monotremes. I think it was so reported in "The Times."

Again has not the morphological conclusion, that the Ostrich is a degraded descendant of some Carinate bird, also been upset?

Mr. Gladstone's remark upon the increasing prevalence of the views founded upon Darwin's theory of evolution, that they seem to be all too much of a "*steeple chase*" character, suggests to me the hurry with which scientific and subscientific men make the new notions to jump with this new theory. How frequently have we noted minds, bent too intently on one subject, eagerly to shut out all suggestions that seem to conflict with their craze, and readily to press all favourable ideas into the service of their foregone conclusions. This is the readiness Darwin regretted to observe in himself.

It is said that Ladies alone may change their minds: but if, as Darwin claims, Sir C. Lyell now holds his views, this experienced mind must indeed have changed since 1855, when, after years of devoted study to geology, he wrote:

"We have at least succeeded beyond all hope in carrying back our researches to times antecedent to the existence of man."

"We can prove that man had a beginning; and that, all the species now contemporary with man, and many others which preceded, had also a beginning."

The expression, "a beginning," as applied to man, clearly meaning that at some date *man began as man*, and not as monkey, or protoplasm: and so also for the synchronous species each after his kind. Again he says, *"The succession of living beings appears to have been continued not by the transmutation of species, but by the introduction into the earth, from time to time, of new plants and animals."*

Sir C. Lyell here, being familiar with the Doctrine of Evolution, which is older than Darwin's time, distinctly, after vast research, rejects it, he says:

"Living nature . . . is only the last of a great series of pre-existing Creations."

Neither do we need a greater concession than this, as Mr. Gladstone seems to point out in his 'Proem to Genesis.' It is beside the question altogether to try the accuracy of the succession of the Air, Water, and Land populations of the globe (as set down in the Mosaic record), by the conflicting details which Professor Huxley brings to bear against the revealed account.

Curious it is how this desire to square all kindred subjects with Evolution pervades the Scientific literature of the day. One writer considers that the European is of more advanced development, than the Mongolian, or Red Indian; that it is remarkable in the form of the pelvis: but strange to say this argument *contradicts the theory of development* which is ever from lower to higher working through its accustomed powers ('*natural*' and '*sexual selection*,' '*struggle for existence*,' '*survival of the fittest*,' &c.), contradicts it by showing the advanced form of pelvis to be baneful to the highly developed race in parturition: insomuch that Clevinger considers the consequent danger upon this phase of development to be *the appropriate punishment for the original sin of man; which sin consisted in man's getting upon what were his hind legs!*

It is moreover considered that Man, thus raised, or having thus raised himself from his pristine '*all fours*' condition, has *exposed the femoral artery* to the dangers of accident and war; and surprise has been expressed that this vein has not (by '*variation*' or '*natural selection*,' I presume) betaken itself out of danger further within the thigh, by means of *the survival of individuals*, to this extent so far fortunate, as to have been born with more receding femoral arteries than others, and by the transmission of that good fortune to their descendants.

Here again, unfortunately for the theory, it is found that *not* the naked and exposed savage warrior has reached the more advantageous stage of arterial re-cession, *but* the clothed European, whose risks are far slighter, it is in him this protective advantage is found.

Another instance of the failure of '*natural selection*' to ensure the '*survival of the fittest*' is found in this, that whereas the Reindeer, endowed by its Creator with spreading hoofs to bear it over the snow survives; the wild horses of the Falkland Islands, descendants of the horses of Spain, wandering over interminable morasses, have by '*variation*' developed for their *survival* similar hoofs; but really to their gradual destruction through lameness; their power of variation has not served them, nor will save.

The facts which our naturalists stumble upon in their researches antagonistic to evolution are frequently hinted at, but rarely produced in detail. The facts that are thought to tell are elaborately spread before us.

There seem to be many horns to the dilemma which the theory of evolution has developed.

Mr. W. E. Brooke speaking of the Redpoles (Linota) writes: "*We hear a great deal about 'intermediate forms' said to bridge over certain species; but it is a curious thing that I have not come across anything of the kind; and I have worked among small birds as much as most men. The fact is, men strongly imbued with Darwinian principles are not in a fit state of mind to distinguish one species from another . . . species are not species with them, but evolved forms . . . fortunately they have not brought forward anything in the way of proof.*"

Naturalists of the first rank then are not as Professor Parker proclaims, "all Darwinian to a man."

The "*state of mind*" which Mr. W. E. Brooke one

of our most experienced naturalists has observed, probably includes a faith to remove mountains: as I understand Mr. Wallace's argument (he, being one of those who stumble at the doctrine of special creations) to account for the isolation of certain species in certain of the Islands of the Malay Archipelago, he holds that the great Islands of Java, and Sumatra may have several times been successively submerged, and elevated: he uses the Butterflies greatly in his arguments affecting the Geologic history of these Islands; and applies the case of these delicate forms to theories which concern the movements of the earth's surface of inconceivable antiquity; shewing thereby his faith in their very early arrival at their perfect development; and almost infinitely prolonged existence of these fragile organisms; (surely shaking faith in the view that Geologic eras had their own peculiar species; promulgated by Lyell, Darwin, and Parker.)

These fragile creatures are used to show that one portion of land surface could never have been connected with another; some species never being found in both districts.

Here one must get over the problem how a collector who visits in May let us say Lombock; and Celebes in September; can judge whether or no a certain 'Imago' is common to both; would a Naturalist who had spent a month between Dover and Folkstone; and then cut his way through interminable forests to Lyndhurst: and returned by the very same route within two months time; be considered to have sufficient knowledge even of the butterflies of the South of England, not to mention its Mammalia, Avifauna, and Flora (their superficial study), sufficient to determine the Geologic History of Britain.

If *so great things* depend upon this isolation of species, how is the little detail accounted for that a *Papilio*, of

South America, is sub-specific with one found in the Malay Archipelago.

To account for the presence of species, Mr. Wallace has adopted Dr. Sclater's "hypothetical" Lemurian Continental Bridge, a grand junction of Celebes with Africa, Madagascar, India, but *not touching at Java or Sumatra*, which "*Islands had not risen above the ocean.*" I doubt greatly this to be Dr. Sclater's line of continental elevation. How on recalling the map, this junction of *Africa with India and Celebes*, Java and Sumatra forming no part of it, is unimaginable by my mind, how also is it made to square with *Mr. Wallace's other theory* that Sumatra has disappeared and reappeared frequently in its history.

At any rate all these Geologic changes invented to account for existing species, must throw the *date* when those species *arrested their development at perfection* back to an unimaginable antiquity: and this whether they be Papilios, or Marsupials.

(Metatheria these are designated; but I am not sure what force *meta* has in this combination; whether it must be taken that the beasts *date after* the prototheria; or whether the preposition implies *change* (Evolution from prototheria to metatheria) as 'meta' generally does in *composition*, perhaps it represents both.)

It is a great misfortune that the noble science of Geology (which has in it nothing to affect Revelation when reasonably, and reverently read), should be hampered with the guesses, which are necessary to bend it to the service of 'Evolution' (which has very much in it irreconcilable with the Divine word), and which, until very lately, even Lyell held to be not only irreconcilable with it, but flatly to contradict it. "*There are many phenomena, still unexplained no doubt, to give plausibility to Scepticism.*" (Froude.)

The hard and fast line which has restricted the strong flying Australasian Cockatoos for ever to the east of a strait of sea only 15 miles wide; is *another detail* which no speculation yet put forth will account for—Bali is the western verge of their distribution.

Mr. Wallace says they are beginning, however, now to appear in the next Island, Lombock, 15 miles to the west of Bali. But perhaps these are descendants of escaped birds, as no doubt the natives cage them.

If we are invited to exercise of Faith, which seems sometimes to approach simplicity, on behalf of Evolution, even greater is expected from us on behalf of its reverse; the name of the theory I do not know; Is it 'Degradation by Disuse?'

It is Darwin's own theory concerning the beetles of Madeira, and Mr. Wallace has adopted it for the wingless birds of New Zealand, and Mauritius.

His idea seems to be this, that certain ground-feeding birds, not well fitted for long flights, (less fitted than our Landrail? which has certainly crossed the Atlantic) and existing on land too remote (what is the comparative mileage between Mauritius and Africa, between England and Norway)? for them to reach the nearest shore; had nevertheless contracted the evil habit of making the attempt so long as they had any wings left to do it with; and consequently perished in the dividing sea.

We are not told why being "*far from all land*" New Zealand was not sufficient land for their necessity, nor is this *complete annihilation of the theory of instinct to self-preservation*, which plays such an important part in '*mimicry*' and other *struggles for existence*, at all accounted for.

They were, however, unnaturally prompted to this flight from their great island homes, "*far from land*,"

until the individuals which continued the habit persishing; the shorter, and shorter winged, and less, and less adventurous birds alone survived to continue this degraded advantage to their progeny: and that this process continued to the vanishing point of the wings through degradation by disuse: all ending in a progeny without any wings at all; but I give Mr. Wallace's theory in his own words: others may, perhaps will, draw a different deduction from mine. He is speaking of the opposite case of Pigeons with immensely powerful wings, which they would be unlikely to make use of unless "*blown out to sea*" (*these wings do not seem at all aborted through disuse, one of many details left unaccounted for*) and he says theirs is the *opposite modification* to that of the Apteryx, and Dodo: and may be explained by Darwin's theory concerning the Madeiran beetles some of which have better developed wings than the same species on the Continent, to enable them to return to land after an involuntary trip to sea, but some having no wings at all, cannot leave the coast therefore, "bad flying is worse than not flying at all." I fail to see how this explains the Pigeon's case.

He says to account for the Apteryx, &c., "*bad flying was worse than not flying at all. So, while in such islands as New Zealand and Mauritius, far from all land, it was safer for a ground-feeding bird not to fly at all, and the short-winged individuals continually surviving, prepared the way for a wingless group of birds;*" the process, in words, is easy and brief.

Why was not the degradation arrested at that point where the birds must have found their *evil habit impracticable*, and given up the effort; but yet should have transmitted such Auk-like wings as might be left to them to their posterity: this is one of the processes left to the unassisted imagination of the disciple of 'Evolution' to unravel; for such examples are half worked out.

Darwin has dwelt much upon man's power of developing pigeons: are there any signs of man's degradation of the domestic fowl, and duck by disuse; any signs of their wings becoming aborted; their power certainly being greatly diminished.

In fact what Mr. Froude has said about history has ten-fold truth when applied to Evolution, "*it is like a child's box of letters with which we can spell any word we please, we have only to pick out such letters as we want; arrange them as we like; and say nothing about those which do not suit our purpose.*"

An instance of this kind of manipulation, is found in the first appearance of 'the Snakes;' we are told that the Reptiles appear long before Man, so early as the Carboniferous, an upper Palæozoic period; but we are not told that the Snakes are not included among the Reptilia, we know these belong to the most recent of the Tertiary periods, perhaps even subsequent to Man's appearance.

It will not be overlooked that the curse pronounced upon some creature contemporaneous with Man, "*upon thy belly shalt thou go,*" would have been quoted against the Bible, could it have been proved that the Snakes, were already thus degraded *before* Man's appearance.

The late appearance of the Frogs, and Snakes (Ophidian, and Batrachian) in itself overthrows the theory of Evolution; seeing that they are the lowest in organisation of the Reptilian Order: which Order, in the Triassic period, when Mammals were but two per cent. of existing creatures, rose as high as 27 per cent. Here the lowest organisms appear not first but last, here is no Evolution.

An instance of this kind of manipulation may be seen in Dr. Réville's reply to Mr. Gladstone; which I comment on in these remarks upon 'Evolution.'

Dr. Réville admits that in Genesis I, the Hebrew for firmament signifies *expansion of something*.

And adds that it also expresses *something solid*.

He *selects the latter interpretation* as serving his purpose to convict the author of the Bible's first chapter with a solid sky.

How one anxious to acquit the author might have *shuffled the letters*; and *rejected the latter interpretation* in favour of the former.

Dr. Réville says in the Septuagint the word is rendered 'stereoma' a solid vault: but the *Hebrew* is the original; the Septuagint, a Greek translation by men inspired no more than the Revisers of the English version of our day.

By a further choice of letters, the friendly critic might point to the express expression in the 20th verse, '*open firmament*,' where the *Hebrew certainly signifies expanse*.

But this Dr. Réville carefully *omits to notice*: these letters, if noticed, were rejected as not helping to spell out the word wanted.

It all looks very like "*saying nothing about those letters which do not suit the purpose*."

In defending himself against Mr. Gladstone, Dr. Réville "*regrets to tell him*" that, although the Hebrew for firmament expresses *expansion* of "*something*;" it also expresses "*something solid*:" and adds that 'stereoma' is the Septuagintal word for firmament, he says: "*Stereos, in fact, expresses the idea of firmness and solidity*."

The Greek translation serves best his purpose, therefore he suggests that the Sacred author represents the sky as solid; with cracks during the deluge when the waters above the solid vault flooded the earth.

Dr. Réville's interpretation must be modified if the 20th verse be taken into account; there the expression

in the English version is the '*open firmament*' which *ill accords with the idea of a solid closed vault*: while if the Hebrew original (of more value than the Septuagintal copy) be consulted, *the words convey that idea of expanse* which Dr. Réville, whilst admitting as above, preferred to reject as unsuitable to his purpose; as I have already pointed out.

He presses all the old, old arguments (which I need not to follow). But in one passage challenges Mr. Gladstone to explain how, if each Day of creation is now held to represent an era of thousands of years, it comes to pass that the Almighty could put his command upon men to work only *six days and rest on the seventh*, on the plea that *God Himself* had worked *six days and rested on the seventh*.

Here I marvel that the Doctor had not said to himself (with Regan) "Now I spy a danger," which may befall the Geologic argument. For as *no evening is set to the seventh day*; that rest of the Creator may be fairly concluded to be *still in duration*: even as the Geologist finds that the earth's surface since the 'organisms' contemporaneous with man came into being is at inhabitable rest; as the Evolutionist also has concluded that the present 'organisms' have *rested* from development; for have they not reached a platform whereon it is hopeless that they will produce the 'missing-link:' a rest which still endures.

The seventh day therefore, *God's rest*, not having elapsed, does *not* correspond, in length of duration, with man's Sabbath, followed by renewed weekly work.

The Almighty's work, organic and inorganic, upon this planet appears to have reached its rest.

Again, as to the *six days* of 'the Hebrew Legislator' we have the Hebrew Psalmists' word, that God's day is *not the same in duration of time* with man's '*to-day*' or his '*yesterday*'; "*a thousand years in Thy sight are but as yesterday*," and if a thousand, why not a million.

I have not here alluded to the "evening" of Gen. I., because Dr. Réville uses Moses' *2nd enactment*, from Sinai, as containing *in itself* the verdict against "*the lax interpretation*" of those first-mentioned days, whose 'mornings' and 'evenings' are recorded.

Without doubt, men, who have science at heart before everything else, have pressed the letter unfairly against Scripture; and by that letter have "tried the word to the uttermost."

Do men really believe that the mind of the Author of Genesis was so short-sighted as not to have perceived that, having declared the division between day and night as taken place *before the evening of the first period*, it was not until *after the morning of the third period* that he directly points to the *existence* of the sun as the ruler of the light, and darkness, of the day, and night.

Moses mentions *these divisions* as taking place during the earliest period; and expressly says that the sun (not *mentioned* until the fourth period, unless under the general term, light, and God said, "Let there be Light," rules over, *divides* day and night; surely here is something, that required explanation, too glaringly apparent for so serious a charge of confusion, of ignorance of *cause*, and *effect* (both of which have been put forward) to be brought against the writer.

Then as to the literal use of the word 'the Day;' the scientist, who expresses great faith in the subtle power of Hebrew Exegetes to supply new interpretations, might have paused to consider the force of the *definite article* 'the Day:' this seems to suggest '*of the week*' after the word: the first, the second day of the week: thus the Sunday school lad would doubtless read it; and to him no alternative could be expected to occur.

And this rendering, accepted so readily, makes these

days no doubt to appear *consecutive days*: and makes it necessary to re-examine the true force of the original; of which the accurate rendering is after all not 'the Day' but 'a Day,' "and the evening and the morning were a fourth day."

It has been urged that the term day should mean period: Why should it not? It is closed by an evening, and a morning. *Must* this expression be confined to the solar day of 24 hours? How do the Hebrews use these terms? "In the morning sow thy seed, and in the evening withhold not thy hand." Does the scientist himself, who speaks of sunrise, and sunset; and labels organisms as Oriental, or Occidental; never talk of the morning, and evening of life.

Besides, the critic holds that the first three days are not, according to the author, regulated by the sun (as yet uncreated), therefore their evening, and morning are unknown quantities.

But, by *literal* pressure, Moses may be made to err yet more surprisingly for, in his second chapter, he crowds the six days' work into *one day*: where the generations are spoken of as created "in the day when the Lord made the Earth, and the Heavens." The spirit of such criticism would require a rainbow to appear in every cloud, on the plea that God, through Moses, had promised no less.

There are one or two well-known points, which have been often brought forward, and these it is not necessary to notice. But, however, the *five last periods* may appear to be confined consecutively each within 24 hours, all in the course of the same week; as the superficial reader finds it: there is no such confinement for the *first period*: of which it simply says that it ended in an evening, followed by a morning.

In the series, I., Light : II., Land and Seas : III., Vegetation : IV., Stars (I think it is Miller who suggests these now to be *visible* for the first time to the Seer, who wrote down his *vision*, through the condensation of the moisture, 'which was above the firmament,' upon the surface of the cooling earth): V., Flying Creatures, Water Monsters, Fish, Winged Fowl : VI., Cattle, Creeping Things, Beasts, Man.

However, in this long series, *one* or even *two orders* are judged to be displaced from their position in the Geological Record (although there is no statement in the text confining the Creeping things to the sixth day, or the Fowl to the fifth day, &c.), it must remain to all time a marvel to the sober Geologist that 'unscientific Man,' unassisted by Divine inspiration, could so accurately have read the secrets of the Earth's bowels

Why does he place Man last? The very last, in the exact order assigned to him by the greatest Geologists of England and Germany, by Frenchmen like Gaudry, (who was an Evolutionist, like Owen, upon more reverential principles than Darwin), who when graphically describing the scene, where the great extinct Mammals were numerous, says "in the concert of their voices the voice of Man alone was wanting." By Owen, who says of the Horse, (the last of the Mammalia to appear before man) "*I believe the horse to have been predestined and prepared for man,*" by Schmidt, who observes man could not "*rise above his origin till the Glacial period (as may be assumed) gave way to incalculably long ages of assured order in the later Geological period in the central and northern latitudes.*" I take "rise above his origin" to mean complete his transition from Ape to Man.

I quite agree with Professor Drummond concerning the harm the guerilla band of skirmishers, on behalf of

Revelation (by which I suppose he means the half informed, wholly unaccredited), may do: but I have not the same facility to hand over all details in Genesis, or other books of the Bible: I believe that Genesis reveals *more* than the broad fact that the World was made by God."

Evolution and Geology are being made interdependent, and for this product of man's advanced reasoning powers, we are invited to give up that which we hold most precious: this invitation is clear enough however it be veiled:

"This difficulty soon lessens, in every well-ordered mind, as soon as the most elementary knowledge of Geology is obtained; especially if the echoes of John Milton's 'Song of the Creation' have been allowed to die out of the inward ear." (Mammalian descent by Professor Parker Hunterian Lecture, No. viii.)

John Milton's song is a poetical version of the Biblical account!

A treatise on Mammalian descent, by Professor Oscar Schmidt, of the Strasburg University, places comprehensively before the student all the arguments which, up to the present time, can be brought together in favour of the Evolution of the Mammalia.

Leaving such subjects as Crabs, Sponges, Jelly Fishes, and their alleged changes; the Mammalia are easier to follow; and are more to the purpose, for amongst them after all must be found, if possible, confirmation for the presumed ancestry of Man.

It is well that all known details, that can be made useful to confirm the Evolution theory, should thus be gathered together to enable the ordinary reader to form some opinion of their value: he has been too much confused by statements generalised, and often contradictory;

abstract phrases; guesses; conjectures; hypotheses; such as those which account for the proportions of the Giraffe; the marvellous ornaments of the birds of Paradise; the resemblance (Mimicry) of the Moth (*Macroglossa*) to the Humming bird; so close that the Indians themselves believe in a facile evolution from insect to bird. Statements about which things make us say in the words of Froude, "*I have been struck dumb with wonder at the facility with which men fill in chasms in their information with conjecture:*" witness Schmidt's remark where he doubts the 'conjecture' put forward to account for the extinction of the 'Sabre-toothed tiger' that "*a bad hypothesis is better than none,*" and claims for his own procedure that a "*Zoologico-palæontological method of investigation and drawing conclusions must be granted as a matter of course.*"

The Professor treats of a "*special comparison of the living Mammalia and their ancestors.*"

In the first group with which the Professor grapples it is a matter of regret with him that his organisms appear suddenly on the scene, heralded by no transitional forms. "*For instance, the hoofed animals which, when first met with, are unfortunately already very marked in character, possess the full number of toes and a good supply of teeth.*"

Surely here, granted a certain adaptive power inherent in some creatures, there is an admission of what must have amounted to *special creation of the most important group of all.*

But he dare not reject special creation as possible in the case of the Monotremata (Anteaters, and Platypus), "*A separate origin for the Monotreme cannot be unconditionally rejected, but is exceedingly improbable.*"

THE MONOTREMATOUS IS THE FIRST GROUP taken. The strangest of all animal forms in the opinion of Giebel, a "*man of vast knowledge but opposed to the theory of descent.*"

Brehm holds them to be the connecting link between the Mammals; Birds; and Reptiles: but Schmidt differs, he would leave out the Birds for "*a direct connection between Birds and Mammals there is not; they are allied through their ancestors.*"

But after a learned description of their anatomy compared with that of their contemporaries, including Man; the *same result* has to be confessed, which Professor Parker so naively admits concerning his "Prototheres," "*Not a trace of any fossil discovery leads us from the present living Monotrema back to the primeval world to which nevertheless they stand in such palpable relation.*"

The second group compared with their ancestors is THE LIVING MARSUPIAL ORDER.

These stand between the Monotremes, and higher Mammals according to the Professor. The Monotremes are the PROTOTHERIA (early beasts) of Huxley, and Parker: they are followed by the METATHERIA (after beasts), and end in the EUTHERIA (higher beasts); but Schmidt says "*the gap between the Monotrema and the Marsupials is left to the free play of the imagination.*"

But "*within the order*" a dental connection is found. After a review of the dentition of extinct, and existing Marsupials, the connection is restored "*almost directly.*" The fossil, 'Neoplagiaulax,' and the existing dwarf Kangaroo (B. Penicillata) having a sole grooved premolar, and two low tuberculate molars in common: but that this suggests *ancestral* connection is discountenanced, nor can he "*speak of any direct relationship,*" he adds, however, that Lemoine has found agreements between 'Plagiaulax,' and 'Microlestes:.' "*and has thus lengthened the series from the present to the Trias formation,*" this wording implies Evolution; but it is only founded upon 'agreements.'

There are then no links discovered between reputed

ancestors, and differentiated descendants, *if they are differentiated, and not merely congeneric species.*

With regard to another Marsupial, two Evolutionists *are at variance*, Cope deducing 'Thylacoles' from 'Plagiaulax;' Schmidt not agreeing; as both cannot be right; it may be that neither ~~are~~ is a safe guide.

The above examples are followed by descriptions of extinct giant Marsupials, as the 'Diprotodon,' but these are *rejected*, as not having left any direct lineal descendants.

"But with it (Diprotodon) there lived in those days powerful creatures, closely related to the Kangaroos, such as 'Palorchestes.'"

Now if the word "but" implies that 'Palorchestes' at any rate has left direct descendants; it had been interesting to be told wherein that species differed from an existing species: that some opinion might be formed whether the latter were only a *congeneric* species; or really the *same* species modified.

And thus the second group passes; and no missing link established.

What more is said refers to certain modifications (specific differences some will call them) in the toes of the American, and Australian Marsupial species: giving rise to the discussion as to whether of the two Continents were the primeval home of these Metatheria.

The third living group specially compared with their ancestors (the forms conjectured as their ancestors) is that of the 'EDENTATA', (Sloths; Scaly Ant-eaters; Armadillos.)

Their connection is to be sought in their early history if it really exist. But at once we have the fatal admission, "*unfortunately we do not know their early history,*" unfortunately (it may be presumed) for the

theory of Descent; as against the doctrine of special creation.

These Edentata range through Asia, Africa, and America: and, as their means of progression, especially among the Sloths, are of the lowest order, to supply them with common ancestors, it would be necessary to bridge the Continents of the hemispheres: and for their sake, and that of the Ostriches, which are in a like predicament, even this chasm in information has been filled up with conjectural! Continents; such as Wallace's Continent, bridging Celebes, and Madagascar, but not touching (for antagonistic reasons) Sumatra: but these tremendous necessities, to efface the Evolutionists' dilemmas, find no favour at the Professor's hands, who remarks, "*There has been no lack of very bold combinations to bridge over the gap to our undiscovered friends: . . . but Geology has as yet not been able to say her 'Yea' to this.*"

All he can add for his third group is that many Edentates of gigantic size "*inhabited the same tracts of land which are at present the abode of their evident successors, if not descendants,*" and this distinction admitted by the most candid writer upon this subject, seems to suggest that the *extinct species* in the case of the Horse, and other families, *may not be after all ancestors, but only predecessors.*

And lastly the hazarded theory of the Evolution of the Brazilian Sloths, from Diluvial giant ancestors, is dismissed as untenable with the pregnant remark, which appears to strike at the whole Darwinian hypothesis under which no 'variation' is too great, "*the limbs have attained extreme formation, which excludes every thought of their having been transmitted the one (Bradyrodæ) from the other,*" (*Megatherioids.*)

So the record of the *failure* of the ancestral descent of the fourth group concludes, "*We are again referred to*

a primary form that lies beyond all the palæontological discoveries yet made," and "*with this division of the living world, we may be said upon the whole to stand utterly helpless as regards Geological antiquity in so far as the question refers to a special proof for the origin of species.'*"

This writer seems not to do, what elsewhere I have felt compelled to point out, keep back the facts, and admissions which might be useful to opponents. Many times regret is expressed at the failure of facts to prop up the theory of his choice. Had he chosen differently we cannot but believe that all the information might have been used 'con' instead of 'pro.'

All persons not within reach of good libraries, should be grateful to this author for having collected all that can be said in favour of Evolution of the Mammalian Order (including as it does Man, and being the Order of which the 'missing-link' might most reasonably be expected to be traced in the numerous, and giant remains) by such of the eminent German Palæontologists as agree with his view: for presenting it in a form so free from all trace of that "brutality" towards the views of those who would defend the old Faith to which Dr. Réville himself alludes: so free also from those tortuous and long winded generalities; that free use of abstract terms; which make it a science in itself to comprehend the nature of the conjectures, and conclusions upon which the authors are engaged. We are thankful for his work were it only because of the pleasure of reading a treatise on the subject, free from the half-dozen cant phrases which so elegantly comprise the sum of Darwin's notions. When pointing to Von Nathusius as "*always vehemently opposed to the Doctrine of Descent,*" he does not stint to speak of him thus "*unfortunately, our greatest authority on domesticated animals,*" albeit Darwin, to a great

extent convinced by his own experiments amongst *domesticated* doves.

The fourth group, however, THE HOOFED ANIMALS, is to make up for the deficiency among the first three.

No other group is so rich in fossils dating from the earlier Tertiary times: and the pedigree of one animal at any rate, the Horse, is shown possible, probable, or certain, according as the data are accepted, especially as to whether the earlier forms are *conspecific (ancestral)* or *merely congeneric (related)*.

The ancestors of other claimants are sadly too large to be convincing: and perhaps some may think also the first ancestor in the Horse's pedigree, sadly too small even for a pony; being of the size of a fox, and called Eohippus (early horse) the only likeness to the Horse *quoted* by Schmidt is the immense dissimilarity in the toes, four instead of one; and difference in the teeth.

But as the Ungulata (Hoofed Mammals) furnish the most *comprehensible* ancestral proofs, it will be best to point out the ancestral claims for *each species as they are noted*; The lines upon which *the main argument* proceeds concern the teeth, and toes; and the *reduction* of both appears as the great feature in successful *development*; the details of which the reader must examine for himself.

It is however open to observation here that whatever ancestral claims are made for these most important Mammals; it is *no such claim as is understood by Evolution in the extreme sense*: it appears to be only such a power of *Differentiation, well within the genus*, which the believer in *a series of special creations* need not be slow to admit.

This also appears to be the view of Dr. Haughton, Professor of Geology in Dublin University, who wrote in 1866, "the transformation of species, in my opinion, has not yet been proved in a single case," and in 1876, "We

should expect, in conformity with our views of the wisdom of the Creator, that He would endow his creatures with a power of deviating somewhat from the original type according to which He made them." And mark, *domesticated* deviations are misfortunes; all Pigeon fanciers, Cattle breeders know that they are accompanied with new, and fatal maladies; which leave the domesticated animals weaker than the wild species.

If thus much power be granted; other claim the Professor appears to give up early in his work, as we saw, on their *first appearance* they are "*unfortunately already very marked in character.*"

There is no sound argument supplying missing links, between living creatures and ancestors from which even credulity revolts, traceable in his treatise.

Of the 'Ungulata' the PIG is taken first; the Pig, and Peccary, owing to their reduced number of toes, are pronounced more fleet than their ancestors.

Four fossil pigs with *more toes* than, but with *teeth like* our pigs, are not concluded to be distinct species, but *direct progenitors* of our pig, in a line "*evident enough to those who choose to follow it.*" The Peccary has five named progenitors.

Second, the HIPPOPOTAMUS, no direct ancestral claim made. Third, the RUMINANTS, no claim made. Fourth, the CAMELS AND THEIR VICAR THE LLAMA of these there have been abundant species; the names of two are given; in these species certain changes (perhaps differences) advantageous to the 'organism' in the teeth and toes are taken to be in a *continued line* of developement: but these *changes are well within the genus*: who shall say they are *within the species*; which alone would be inherited variation.

To the families of the DEER, OX, ANTELOPE, AND RHINOCEROS, kindred arguments are applied.

Without doubt all these have been *preceded by allied forms* from which they may, or *may not descend*: But the fact remains as already acknowledged that on their first appearance they are "*unfortunately*" markedly in character like the existing 'Ungulata.'

The case of THE HORSE is then taken as the clearest:

And it must be admitted that whatever of true descent is established of this Ungulate, should be conceded to all the others, save man, without further proof, 'valeat quantum,' but then no more is claimed for the Horse than that *it descends from* a Horse (Eohippus). Throughout the record of these advantageous transformations, from more to fewer teeth; from four or five toes, with their numerous auxiliary bones to one simple toe: the thought occurs, that the animals must have been previously developing upon the wrong track, that so much Reduction should be necessary for their 'Survival.'

Dr. Elam says of the Horse's pedigree, "as furnishing a *complete demonstration* of the truth of the doctrine of evolution: however much one may admire, one can scarcely envy the contented state of mind that can be satisfied with such demonstration as that," but we are like sheep, and follow them when our "Philosophers say 'Evolution,' 'Natural Selection,' 'Survival of the Fittest,' &c.; phrases so much to the taste of many both of those who understand them, and those who do not, that they will probably represent, and obstruct the progress of true Biological Science for an indefinite time." (Nineteenth Century, April, 1878.)

Very clever is the process by which the English, and German Evolutionists have illustrated the progressive appearance of 'Equus' from that species, Eohippus, in THE EARLY EOCENE (dawn of the recent) formation, of the *Horse-like* animal of the size of a fox, with four toes, and remnant of a fifth.

In the next Tertiary age, THE HIGHER EOCENE, a second appearance 'Orohippus,' an animal not much larger, and whose resemblance to a horse is acknowledged to be *still distant although nearer* than 'Eohippus;' in this the remnant of the fifth toe has disappeared.

The third appearance in THE EARLY MIOCENE (less recent) is of 'Mesohippus,' of the size of a sheep, and with but three toes (the changes in dentition in these links are parallel with the toes, for the animals benefit.)

In the fourth form 'Miohippus' in THE UPPER MIOCENE, a change is not so apparent.

A fifth form is found in THE LOWER PLIOCENE (more recent) of the size of the Ass; the three toes are still in existence, but only one reaches the ground: this American form is like the European 'Hipparion' which (by Atavism) is said occasionally to occur to this day.

A sixth form occurs in THE UPPER PLIOCENE it is true 'Equus,' yet not 'Caballus,' (our own most beautiful servant): it has but one toe, and two rudimentary metatarsals (splints.)

These are the Species collected from the Tertiary deposits (through that vast Geologic era) which have been selected to be ranged in line for the pedigree of the American horse long extinct.

And a similar series, under somewhat similar dates, has been supplied for the European horse.

As *the connection between the two hemispheres*, wherein these changes are said to have been simultaneously progressing, is still a bridge in the clouds; it is conceded that, although the changes were simultaneous, and parallel throughout this tremendous period, yet they took place probably "*without any intercourse*" between these changing species: and this I understand to be accounted for by the theory of 'Convergence;' which if it mean anything must

surely mean Divine Guidance ; or else, inasmuch as differentiation is said to be guided by the *surroundings* of the organisms, it was a wondrous *coincidence* that Species in two Hemispheres should have had such surroundings through millions of years, as should have by Variation guided their frames to an identical result.

The descent of the other 'Eutheria ;' ELEPHANTS ; WALES ; SEALS ; CARNIVORA ; is of equal and similar interest.

Of the SEALS there is absolutely "*no clue to their origin.*"

The lower form of DOGS (carnivora) "*approach*" the 'Insectivora' (represented in Europe by the Hedge-hog, Mole, and Shrew), in their dentition : and, "*having rudiments of clavicles and of a fifth hind toe,*" must therefore be descended from ancestors "*with well-developed clavicles ;*" and five toes ; which conditions are found in the 'Insectivora : ' and the conclusion is that "*our present dogs have been traced back to the Eocene and Pre-eocene Insect-eaters :*" to which class Professor Huxley traces not only the Carnivora, but also the Ungulata.

Quadrupedal ancestors are [claimed for the WHALE from among the Hoofed Group.

All other demands upon the imagination, made by this theory of Evolution, are dwarfed before the spectacle called up of four legged ancestors of the Whale wandering in abundant numbers on the shores of the primeval oceans, and at last betaking themselves to the deep, and absorbing, reducing, or aborting their no longer serviceable hind-legs : until nothing but the "*rudiments of a pelvis,*" with "*sometimes the last remnant of a thigh bone,*" remain to them : modifications, indeed, of forms once "*classed in the widest sense of the word with the primary Hoofed Animals which still possessed five toes, both on the fore and*

hind legs." Imagination fails before the inconvenience they must have suffered during the period necessary for the modification to become complete: yet they had completed this before the middle of the Tertiary period: when, although *their* remains are found abundantly, the remains of their *huge progenitors* in any transitional state are nowhere found; nor in the previous strata one missing link.

The APES are taken last.

The American and European descend from "*two entirely distinct origins.*"

The Occidentals "*point more probably to one of the Insectivorous species than to the Pachyderma.*" (sic) A.

The Orientals including the Anthropomorphous (Man-like) Apes descend "*from ancestors of the Pachydermata (sic) species.*"

With the exception of a few remarks upon dentition; I find *no more to explain*, what has come to be especially interesting, *the ancestry of the Anthropomorphous Apes*; nothing in this treatise, wherein all, that has been as yet found useful to establish the theory of Descent, is passed most ably in review.

As to MAN himself, Cuvier's remark, which may now fairly be reapplied to this subject, holds good for His case even in a more special way than to others "*If the species had changed gradually, we should find traces of these gradual transformations.*" even so.

If it be true that the Horse, which is held to have appeared in his latest, his surviving transformation, upon the scene about the *same date as man*: and, in both

(A). Authors vary somewhat in the declensions of classical nouns, and their adjectives: and we sometimes meet with anomalous plural forms. Not, of course, of the class of the lady novelist who, noting the plural form of Hippopotamus, described the river gambols of the "Hippopotami, and Rhinoceri."

hemispheres, the Horse's alleged transformations are so clearly traced through the whole Tertiary period; it adds immensely to the significance of Cuvier's remark: to observe that *all parallel traces of Man's transformation* have been vainly sought through the world: there is no trace whatever of the missing-link.

Professor Schmidt says little upon the subject of Man: perhaps there is little to say. "*The study of Anthropology can in no way boast of having made any definite progress during the last ten years.*" Hitherto that descent has been inculcated by a series of hypotheses, and sketches in comparative anatomy (Embryonic, and otherwise), all direct evidence as to his Evolution from protoplasm being altogether wanting. Nothing appearing clear but that the creatures are framed upon an homoiopoeitic plan by the Divine Artificer, all which is confirmed by Geology, the science: and not shaken by Evolution, the theory.

No help is afforded confirming *the alleged arboreal ancestry of Man*: but in the last page we meet with this, "*Reason, acquired with speech, has made Man more and more independent of the effects of his natural surroundings.*"

Surely the Being who should acquire simultaneously Reason, and Speech; or rather as the order is here Speech and Reason: such Speech, and such Reason: as we find to be his endowment (acquisition) must be claimed as a very *special creation*.

As the other 'Eutheria' "unfortunately" at their first trace are found endowed with their present characteristics. So, if possible, in a more marked and 'unfortunate' (for the theory) manner, this, the highest of all, appears *from the first* THE PERFECT MAN: and it occurs naturally that the *greater* the success claimed in finding fossil

proofs of transformation of other species; the *more* (if they existed in the strata of the same earth) traces also of *transitional Man* ought to be found: but there are none; the link is confessedly still missing.

At the Munich Conference, in 1877, when Hæckel, of Sena, propounded his theory of Man's descent, Virchow, of Berlin, the great Pathologist, rebuked him for teaching that, as proved, which, at best, was possible, and declared connection between Monkey, and Man; to say nothing of that between Crab, and Man; was unintelligible to Zoology; nor could be taught as established truth.

Very many of the theories represented by Scientists as settled facts, have one after the other been discarded by Philosophers of equal research. The almost infinite antiquity of this Globe which is found necessary to impress upon the student, to make room for the Evolution of Man, and the other creatures his cotemporaries, from the date when all were in protoplasm, to the date of the Cretaceous and even Jurassic periods, when the Mammalia appear already perfectly developed: to the date of the Tertiary period, when Man first appears; appears in the perfect development which he still retains: periods themselves of tremendous antiquity. This antiquity, vast without doubt; is yet considered by many Scientific men to have been greatly exaggerated.

This exaggeration, Professor Thompson, of Glasgow, holds to be incompatible with his calculations founded upon certain solar conditions, affecting the probable age of our Globe: and Professor Haughton holds his views to be correct. And Professor Phillips, of Oxford, himself doubts the value of the enormous drafts upon the bank of Time which the Scientists find themselves compelled to draw to make room for their notions.

If man have, since the remote Tertiary period, made

an inappreciable advance in type ; what must have been the length of period during which he was "getting upon his hind legs," what the period necessary to elapse whilst protoplasm was developing into the 'arboreal ancestor.' Was this ancestor quadrumanous ?

Darwin's 'Arboreal Ancestor' also is by no means generally admitted as a fact, as Parker gives out ; or even as an hypothesis : Hartmann (himself an Evolutionist) says in his treatise on the (so called) Anthropoid Apes, "*This supposed progenitor of our race is necessarily completely hypothetical, and all the attempts hitherto made to construct even a doubtful representation of its characteristics are based upon the trifling play of fancy.*" Of attempts made, Darwin's is the most serious, and here a renowned Scientist stigmatises it as the "trifling play of fancy." Yet Darwin's theory has been accepted even by Students !

Hartmann and Huxley are agreed in allying the Gorilla, the Orang, and the long-armed Gibbons more closely with Man ; than with the Apes Proper ; for this, Hartmann, relies upon the Comparative Anatomy of their several frames : to this end he discards the Quadrumanous Order (Four-handed), denies the Apes to be Quadrumana at all ; and places Man, Gorilla, and Gibbons in the First Family of Mammalia together : and the Apes Proper, and Long-tailed Apes in the Second Family : to support this unnatural alliance he places the intelligence of the Apes among the Mammals as highest. But has he forgotten the Dog ?

In the interests of Evolution it is that the Quadrumana are got rid of. But Evolution has been applied psychologically, as well as morphologically ; to the Mind, as well as to the Frames of the Creatures.

But if Morphology shows the brain-pan and brain of the Ape to be closer to Man, than to Monkey ; how comes

it that, between the minds of Ape and Monkey difference is inappreciable; between the minds of Man and Ape the difference is appreciably incalculable; a difference according to Dr. Romanes "not as to degree, but as to kind."

There is no detail, however small, too small to be made use of to prove the family alliance between Man in his beauty, and strength; and Woman in her beauty, and grace with that dire-looking brute the Gorilla. For instance, the direction of the hair or down on the forearm is pointed to as the same in both.

The ill-developed Gastrocnemius (also Soleus) of the Dark Races is pointed out to bring them nearer to the Apes, than are the White Races with fuller and more shapely legs. But we are not told that the Apes are even more lacking in the 'Gluteus,' whilst the Hottentot is quite as well furnished with that muscle as the White Man. Probably the cause for the poor shanks of some Dark Races must be sought elsewhere: and more probably this imperfection is not shared by all Dark Races which differ greatly even in adjacent tribes. Travellers often tell of figures like beautiful bronzes; the bronzes are of Grecian type: and never yet had Greek bronze poor Gastrocnemius muscles. As to the Soleus upon which really depends the beauty of the leg, that might be overlooked, as it generally is in the illustrations to the *Graphic* and *Illustrated London News*: see drawings of Highlanders and Hottentots passim.

Again among these details, to spell Evolution, *one letter* has, so far as I know, been '*said nothing about*'; because, so it appears to me, it would not be to the purpose.

I allude to the Whites of the Eye (conjunctiva).

By the principle of 'Reversion,' so useful to the Evolutionist to account for certain 'Variations.' If the

'Arboreal Ancestor' of Man and Monkey exposed the Whites of the Eye, there would occur now and again an instance of Reversion (like that claimed for the Horse 'page 138'), amongst those of its, or his descendants that have culminated in Apes: I am not aware that such instance has ever been brought forward. If, on the other hand, the 'Arboreal Ancestor' did *not expose* the Whites of the eye, by the same principle of 'Reversion' would not some of his 'Erect' Descendants now and again have presented the remarkable phenomenon of the Eyelids fitting up to the Iris of the Eye, concealing altogether the Conjunctiva? I have seen no instance recorded of such Atavism.

If the Races of Man do *not* descend from One Pair, as is one of the philosophical theories, contridicting the Bible: and; if the Evolution theory is right, that all dscond from the 'Arboreal Ancestor,' then in this small detail we have the astounding coincidence that all the Races have independently reached one point, the Evolution of the Exposure of the Conjunctiva.

I believe myself that as it is true that no one of God's creatures, excepting Man, exposes the Conjunctiva, in which so greatly consists the clear beauty of Man's expressive countenance. So is it true that there is no Race of Man, which does not show, in all its examples, the Whites of the Eye.

With reference to the Evolution of Mind in Man, and the other animals, there seems no great harmony amongst the Apostles.

Darwin applied Psychological Evolution to the case of all the Organisms.

Wallace, who I believe hesitated over the Evolution of Man's frame from a common ancestor with the brutes certainly denied that Man's mind was evolved from lower psychical types.

The Reader must accomodate the theories for himself: how Man's mind could have had an independent origin, whilst his Frame had itself been derived from an origin common to the Organisms. Perhaps Mr. Wallace took note of this dilemma and, holding the doctrine he did concerning the independent origin of Man's mind, saw how fatal it was to the theory of descent founded upon Anatomy; and has endeavoured to avoid its horns.

Indeed these conflicting theories and doctrines seem to upset the Evolutionist's view so far as Man is concerned and if that view be false in his case, how can it be accepted as true in any other case. Shall we conceive of the Creator allowing Nature, working by second Causes (or Herself the Second Cause), to evolve all living forms, save one, freighted with intelligence from protoplasm; but in the sole instance of Man to have *immediately* created Him.

Upon Psychological Evolution, Romanes differs from Herbert Spencer, and from Fiske; from whom Lewes differs in opinion. While Mill and Bain, who ignore psychical heredity, are judged to be altogether out of court: Lewes regarded instinct as 'lapsed intelligence.' Spencer defined instinct as 'compound reflex action.' Romanes holds that Spencer's view cannot be correct and instances 'sneezing.' "*No one thinks of sneezing, or of the convulsions produced by tickling, as examples of instinctive actions; yet they are 'compound reflex actions' to a degree of compounding not easily paralleled, and certainly much more so than any of the non-psychical adjustments which are given by Mr. Spencer as illustrations of instinct.*"

But Philosophers may invent an elaborate terminology to convey their researches; and cast about for the motive guides of the instincts of the Snake, the Bee, the

Dog, and the Child ; but they are soon pulled up before barriers of difficulty which none can surmount. Their repugnance to bow before the fiat, "*thus far shall thou go and no further*," is at the bottom of all their mishaps : the last suggestion with which we should expect to meet in their works would be, that such an instinct for example as the '*homing instinct*' was under the *direct* guidance of Him, without whose permission not even a sparrow falls to the ground. So they stand confessedly baffled before such stories as that of the Spaniel which the Archduchess Marie R gnier, in 1872, removed from the Hotel at Mentone to Vienna, and which not long after reappeared at its own home, having run a distance of nearly 1,000 miles never traversed before, and whose monument at the Hotel Gardens records the wonderful feat and the faithful creature's death from fatigue.

Even when the Scientists are weighing so accurately the comparative intelligence of the creatures ; their examples often are not half reckoned up, even where but superficial consideration might have conduced to sounder decision ; so Romanes compares the intelligence of the Parrot detrimentally with that of the Dog ; in his reckoning he fails to observe that he is comparing a bird which passes its every hour between wires of a cage, not with a kennelled dog, but with one that is free as air to gain intelligence and to display it. The Grey Parrots are brought up from the nests in thousands ; not as pets, but as articles of commerce.

It is easy to see how many readers are captivated, and converts made to a theory, by the apparent acuteness of the author as he manipulates his collection of so called facts.

An author takes his examples from Nature, of Frame, or Mind ; from these he deduces his theories, and sets

the theories before the reader, keeping out of sight the examples, but, having them in his *own* mind, he can write upon them comprehensibly (to himself) in terminology more or less abstract, but very difficult for his reader to follow, he, as yet, knowing nothing of the examples.

Now he places *the proofs* of his theory before the reader. They are the examples from which the theory was deduced, this the reader, not detecting, from a puzzled disciple becomes a surprised and delighted convert.

Hartman's honest remark may be applied safely to both branches of Evolution: "*This purely speculative side of research, this purely scientific mode of treating the descent of man, is no longer satisfied with improved assertion.*"

Dr. Tyndall once said that the world, even the Clerical world, was settling down to believe in Darwin's origin of species; and speaking on this, Dr. Elam writes, in 1878, "They (the Clergy) cannot know that, if these things be true, their occupation is gone: the things they preach—God, the Soul, a Future Life—are all delusions: if they once, even distantly, conceived this, we should hear no more about High, Low, and Broad; but all would unite to form one compact, and powerful phalanx to repel the common Enemy that threatens to overwhelm them, under the false name of Science."

As Dr. Moorhouse said in the first sermon which he preached in England after his arrival, "We hear a great deal said about the dogmatism of Theologians, it is high time that somebody lifted up his voice against the dogmatism of unauthorised scientists." It was but an echo of the beloved voice of the late Bishop of Manchester.

"Beware, lest any Man spoil you through Philosophy."

COL. II., 8.

COMPENDIOUS
SCHEME OF RECONCILIATION,

BETWEEN

THE EARTH'S RECORD,

Compiled in the Nineteenth Century ;

AND

THE DIVINE RECORD

Delivered to Moses.

THE GEOLOGICAL RECORD.

- I. THE AZOIC (NO LIFE) FORMATION.—The gaseous and vapour-charged atmosphere of the heated Earth excluded Light—and Darkness covered the deep.
 THE AZOIC PERIOD.—The crust of the earth cooling; and the Waters therefore condensing; Light sufficient to mark the Day appears dimly. Yet no Orb of Light.
 There is no mention of a 'Morning' confining the first period, it dates from 'In the beginning.'

- II. THE GATHERING TOGETHER OF OCEANS.—And first appearance of islets; with Ferns and Lepidodendra.—Plants are found in Silurian rocks of the first Palæozoic age. Upheaval of Continents, &c.

- III. THE PHYTOZOIC PERIOD.—During which Vegetation preponderates; when Club-mosses reached a height of 80 feet; and Mare's tails (*Equisetæ*) 20 feet; it does not reach its maximum until the upper Palæozoic period; the Vegetation seems not very suitable food for living types; but among the Dinosaurians of this period, the *Iguanodon* (length 60 feet) from its teeth appears as a vegetable feeder—Conifers in Lower Devonian—Graminivorous birds.

- IV. THE HOT-HOUSE CHARACTER OF THE GLOBE, when the Gigantic Vegetation was forced, changes—
 And, as the Planet further cools, the Orbs of light are for the first time *visible* from the earth—Seasons are the result.
 Men have not yet tired of repeating the *old* objection, that Moses makes God create the Light before He creates the Sun itself; whose creation is postponed till the fourth day of the *week*! For '*made*,' verse 16, read '*appointed*.'

- V. THE LOWER PALÆOZOIC—THE MALACOZOIC (soft-bodied) age, abundant in Mollusks, Crabs, &c. (The Crustaceans 24 per cent. of creatures)—Fishes appear—no evidence against the appearance of Flying Fish.
 THE UPPER PALÆOZOIC—THE ICTHYOZOIC, abundant with Fish (23 per cent. of creatures)—The Reptilia, including the Enaliosaurians (ocean monsters more than 30 feet in length) these are found in the earliest subdivision of the Neozoic, viz., the Triassic, next above the Permian, which is the uppermost stratum of the Palæozoic; wherein (the Permian) also are the traces of the footprints of Gigantic Birds.—Pterodactyls (winged Reptiles).
 The Whales mentioned in the old translation of the Bible, being Mammals none of which appear until the Tertiary period are a manifest mis-translation, corrected in the Revised Version.
 The meaning of the Hebrew translated 'bring forth abundantly,' viz., 'swarm with swarms,' well expresses the abundance of the creatures of this age.
 THE NEOZOIC AGE—In the earlier period—The Birds appear before the Mammals.

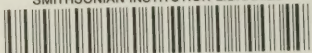
- VI.—THE NEOZOIC AGE—In the middle and later (Tertiary) period the Mammalia appear.
 Few appear till the close of this age.—The lowest form (Monotreme) is traced last which is contrary to the theory of development. The Marsupial (Kangaroos, &c.,) appears first—then the Placental Mammals of the Mastozoic age—the *Development* consists, throughout the Records, of *deterioration* in size, and *decrease* in numbers of many Orders!
 Man appears last: except the Serpents.

- VII.—PLEISTOCENE (MOST RECENT) period—the Ophidians, (Serpents) and Batrachians (Frogs), appear—contrary to Evolution the most *degraded* types of Mammals (Monotremes), Reptiles (Serpents) going on the belly, and Fish (Plaiice), *appear last*; and are still existent.

THE DIVINE RECORD.

- I. GENESIS. I. v. 2. "*And the Earth was without form, and void. And Darkness was upon the face of the deep.*"
- v. 3. "*And God said 'let there be light.' And God called the Light Day, and the Darkness he called Night.*"
- "ONE DAY" (Revised Version) not "*The first Day.*"
- II. v. 9. "*Let the waters under the heaven be gathered together unto one place and let the dry land appear.*"—"A SECOND DAY" (R.V.) not necessarily consecutive.
- III. v. 11. "*Let the earth bring forth grass.*"—"The fruit tree yielding fruit."
- Without doubt to support life—yet it is not said until the date when the Mam-malia, including man, had been placed upon the globe—that is to say the Tertiary Age. "*Behold I have given you every herb yielding seed, &c., and every tree in the which is the fruit of a tree, &c., to you it shall be for meat.*"
- "A THIRD DAY."
- IV. v.v. 14, 16, 17. Again God says "*Let there be lights,*"—and repeats their effect from verse 4, "*to divide the day from the night,*" &c., "*for Seasons.*"
- And now bearing in mind first that there is no punctuation in the Hebrew: and second that in translating it is allowable, nay necessary to alter verbal arrangements, e.g. "*Ingenuas didicisse fideliter artes,*" we read the Revised Version thus "*And God said let there be lights, &c., and the two great lights God made the greater light to rule the day and the lesser light to rule the night the stars also.*" The words '*He made*' (the stars) are interpolated—"A FOURTH DAY."
- V. v. 20. "*Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven.*"
- As I have elsewhere remarked Dr. Reville and his school ought not to succeed in convincing students that Moses thought the firmament a '*stereoma*' in the sense of a '*solid vault*' in the face of this description.—What are these Flying Fowl? Fish, Pterodactyls, or the earliest Birds?
- Evolution teaches that the Birds come from the Reptiles, or from Fish—and here some might find a warrant, for we are told "*the Waters bring forth, &c., the moving creature, &c., and Fowl.*"
- The Translation was made when it could not be foreseen that the Word would be "*tried to the uttermost*" by a Science not then born. The value of *accuracy* is here seen, for the R.V. says "*And let Fowl fly above the earth.*" Cutting off the Waters as their origin.
- v. 21 "*And God created great Whales*"—"great sea monsters".—(R.V.) "*And every winged Fowl,*" and v. 22, "*let Fowl multiply upon the earth.*" "A FIFTH DAY."
- VI. v. 24. "*And God said, Let the earth bring forth the living creature after his kind, cattle and creeping thing, and beast of the earth after his kind: and it was so.*"
- v. 26. "*And God said, let us make man in our image.*"
- VII. Ch. III. v. 14. "*And the Lord God said unto the serpent, &c., upon thy belly shalt thou go.*"

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